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ABSTRACT

Analytical studies were made of three research efforts (an Advocate Survey, the School Staffing Survey, and Project TALENT) for the purpose of determining educational needs of gifted and talented children and youth. The Advocate Survey involved a questionnaire sent to 239 experts in special education for the gifted to determine current opinions in the field on educating the gifted. The School Staffing Survey, which included a representative sample of elementary and secondary public schools, provided statistical data on staffing and school services or programs available in the schools surveyed. It thus defined the actual state of education for the gifted. Project TALENT data were used to identify social and academic needs of the gifted. Data from Project TALENT, a longitudinal study of 400,000 students who were in high school in 1960, were derived from a 1960 questionnaire and from followup studies 1 and 5 years after graduation. The report contains a rationale for the analysis plan (define gifted, identify special needs, evaluate current programs, develop model program and implementation plans) and findings from the surveys and Project TALENT comparisons. A companion volume (EC 040 764) contains consultants' interpretations of findings. (KW)

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Technical Report No. 661
Volume I of II

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SILVER SPRING, MARYLAND

Analytical Studies of Selected Educational Data

30 April 1971

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U.S. Office of Education
Department of Health, Education and Welfare
Washington, D. C. 20202

PREFACE

This report is based on the findings of three research efforts sponsored by the U.S. Office of Education:

- A survey of advocates of differentiated education for the gifted and talented
- The National School Staffing Survey
- Project TALENT.

The Survey of Advocates was designed and conducted specifically for this report by Operations Research, Inc. (ORI), in cooperation with the U.S. Office of Education. Information from the National School Staffing Survey was provided by the National Center for Educational Statistics. This information was extracted from the School Staffing Survey Data Bank, a cooperative effort of the U.S. Office of Education and Westat Research, Inc. The American Institute for Research supplied the information on Project TALENT, drawing from the Project TALENT Data Bank, which was developed jointly by the U.S. Office of Education, the Institute, and the University of Pittsburgh.

The research plan was designed by Operations Research, Inc. Interpretation of the data was solely the responsibility of the consultants listed in the Acknowledgments and does not necessarily reflect the opinions of ORI or the U.S. Office of Education.

ACKNOWLEDGMENTS

The ORI project team wishes to express its appreciation for the contributions of a great number of people who helped in the design and execution of this study and in the interpretation of findings. Encouragement and needed support were given during the early stages of development by Acting Commissioner Dr. Terrel H. Bell, and in later stages by Dr. Sidney P. Marland, the Commissioner of Education. The significant contributions of Dr. Michael Marge, Dr. Paul Ackerman, Dr. J. Ned Bryant, and Mr. Leslie Silverman, all from the Office of Education, also are gratefully acknowledged.

The following Panel of Conferees made helpful suggestions concerning all phases of the work:

Dr. Catherine Bruch

Dr. Louis Fliegler

Dr. Joseph L. French

Dr. Marvin J. Gold

Dr. David M. Jackson

Dr. Ruth Martinson

Dr. Paul Plowman

Dr. Joseph Renzuli

Dr. Irving Sato

Dr. William G. Vassar

Dr. Virgil Ward.

Special appreciation is extended to all of the respondents who so graciously spent several hours completing the Advocate Survey questionnaire. Particular thanks are given to Miss Marjorie Craig, Miss Pauline Williamson, Dr. Virginia Ehrlich, and Drs. A. Harry Passow and Abraham Tannenbaum, whose pretest comments were most valuable.

The study was conducted by the Economic Analysis Division of ORI, under the technical direction of Dr. William J. Leininger, vice president and division director, and Mr. Lawrence H. Revzan, program director for human resource systems. The project team included:

* Peter M. Plantec, project leader, who was responsible for overall technical direction and day-to-day management of the project team and is the principal author of this report
* Cheryl McQuillen, deputy project leader, who shared responsibility for the preparation and execution of analysis plans and survey procedures and is co-author of this report
* Joyce Hospodar, research staff, who was responsible for the analysis of School Staffing Survey data as well as for the day-to-day operation of the Advocate Survey and is also a co-author of this report
* Robert Craig, senior operations analyst/programmer, who developed the edit routines used in the Advocate Survey
* Beverly Johns, senior analyst/programmer who wrote the analysis program used in the Advocate Survey.

Dr. Joseph French, Dr. Marvin Gold, Dr. Ruth Martinson, and Dr. Joseph Renzuli, ORI consultants, made significant contributions during the design of the Advocate Survey instrument. The survey findings were interpreted by three other ORI consultants, Dr. Louis Fliegler, Dr. Arthur Kirsch, and Dr. Virgil Ward. Additional interpretive material was provided by Dr. Sol Tannenbaum, consultant to the U.S. Office of Education.

The Office of Education project officer for this effort was Mrs. Jane C. Williams, in the Office for Development, whose suggestions were most valuable throughout the course of the study.

* Authors

EXECUTIVE SUMMARY

BACKGROUND

Legislative Mandate

The Commissioner of Education is required by the Elementary and Secondary Amendments of 1969 (PL 91-230, Title VIII, Section 806) to report to Congress on or about April 13, 1971, on the needs for educational programs for gifted and talented children and youth (G&TC&Y).

The basic procedures to be followed in the analysis of these needs were decided on at the Commissioner of Education's Conference on Implementation of the Gifted and Talented Children's Educational Assistance Amendments (September 14-15, 1970). That conference, attended by many experts in the field, recommended a three-pronged approach: public hearings on education for the gifted and talented, analysis of the U.S. Office of Education (USOE) delivery system, and collection of data from national surveys.

ORI was involved in the data collection effort, which included analysis of an Advocate Survey, the School Staffing Survey, and Project TALENT, briefly described below.

- The Advocate Survey was designed to determine the current thinking of the leaders in special education for the gifted and talented, as to the nature of these pupils' educational needs and the responsiveness of their educational system. A 25-page questionnaire was sent to 239 experts in the field.

- The School Staffing Survey includes 1969-1970 school data acquired from elementary and secondary school principals concerning staffing and the services available to the children and youth in their schools. The survey includes a representative sample of U.S. schools and pupils.
- Project TALENT is a longitudinal study of 400,000 students who were in high school (grades 9-12) in 1960. Data are available from one questionnaire administered in 1960 and two follow-up studies conducted 1 year and 5 years after graduation. A large number of mentally gifted participated and a broad range of data have been collected on achievement, social influences and development, intellectual ability, etc. The study parameters have been narrowed to 40 variables that make possible comparisons of intellectually average with the intellectually gifted.

The effort was also to have included analysis of the Belmont Pupil Centered Instrument (PCI); however, repeated delays in the preparation of the PCI data precluded their use in this study.

In cooperation with the USOE, ORI outlined the information requirements for the present study in terms of the congressional mandate. The information needed to accomplish the study tasks was supplied primarily by the School Staffing Survey, the Advocate Survey, and Project TALENT data.

ANALYSIS FRAMEWORK

A logic flow diagram of the overall analysis framework was constructed detailing four of the more complex steps in the analysis (see Figure S.1). Discussion of the validity of data for particular steps can be found in the appendices to this report.

Definition of Gifted and Talented

The first task in the analysis was to develop an operational definition of gifted and talented. Difficulties were encountered in preliminary analysis of the School Staffing Survey because of apparent differences among school principals concerning the scope of the terms "mentally gifted" and "professionally qualified to work with the mentally gifted." The "talented" sample in the Project TALENT analysis had to be eliminated because of a lack of standard identification criteria. This major task of establishing a working definition was accomplished primarily through analysis of the opinions of advocates. The process designed by ORI for this purpose is illustrated in Section III of this report.

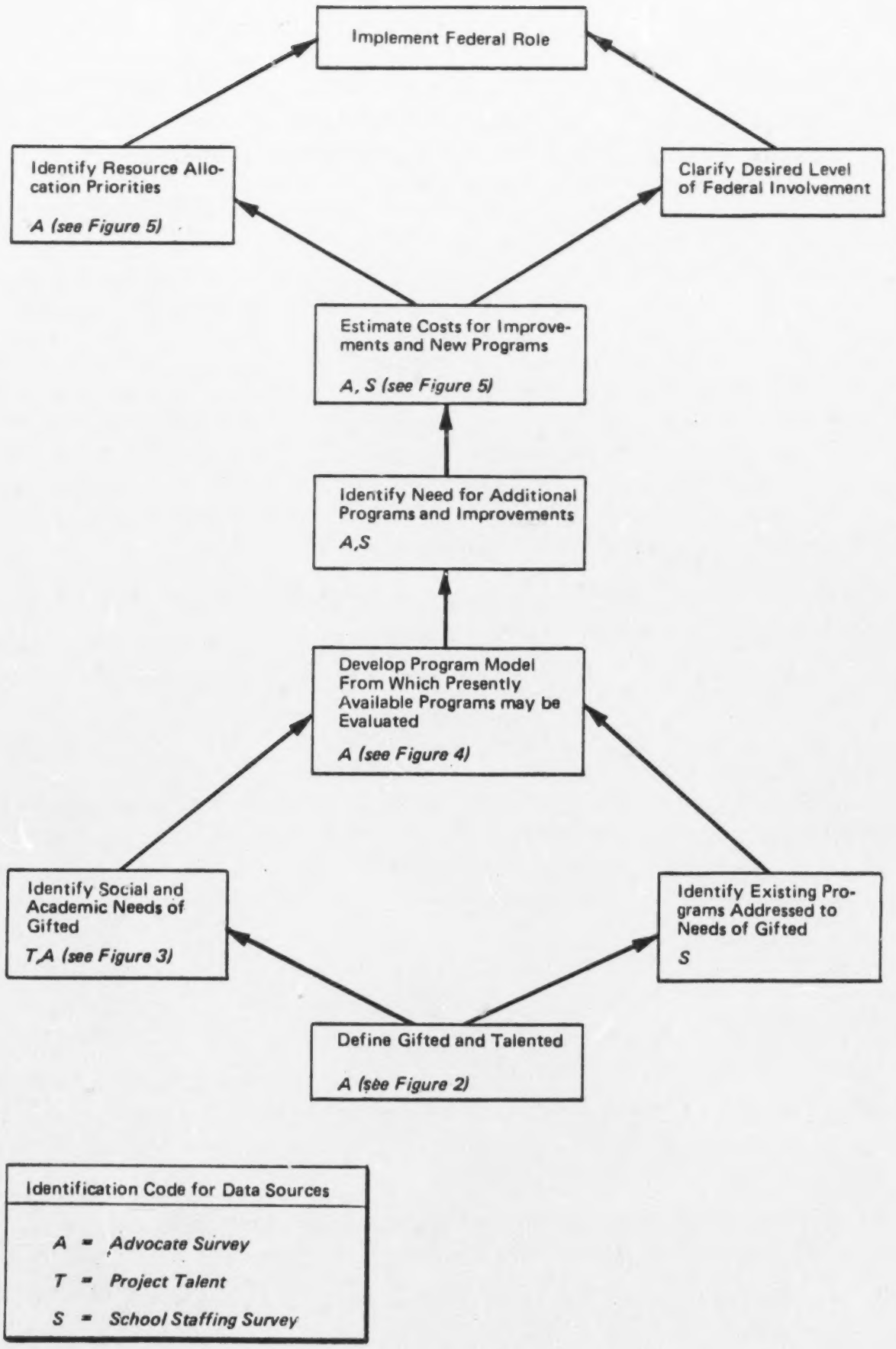
Implement Federal Role
Identify Resource Allocation Priorities
A (see Figure 5)
Clarify Desired Level of Federal Involvement
Estimate Costs for Improvements and New Programs
A, S (see Figure 5)
Identify Need for Additional Programs and Improvements
A,S
Develop Program Model From Which Presently Available Programs may be Evaluated
A (see Figure 4)
Identify Social and Academic Needs of Gifted
T,A (see Figure 3)
Identify Existing Programs Addressed to Needs of Gifted
S
Define Gifted and Talented
A (see Figure 2)
Identification Code for Data Sources
A = Advocate Survey
T = Project Talent
S = School Staffing Survey

FIGURE S.1. SUMMARY OF INTEGRATED ANALYSIS PLAN

Identification of Social and Academic Needs

Project TALENT was used for this purpose. "Gifted" and "average" were defined by scores from a battery of tests of intellectual potential. The substantive areas for which the "gifted" and "average" samples can be compared are: personal development, academic development, and career development. The initial TALENT questionnaire, with the two follow-ups, provides information about the ability of the two groups to choose careers and gives the students' personal evaluations of their choices. Other individual items relating to maturity, independence, and actual leadership experience were included under the personal development heading.

Academic development data are available for high school and the 5 year following high school. A variety of questions evaluating scholastic attitudes were asked in the high school inventory. Comparisons were made between the intended level of educational attainment planned by the students and the actual level achieved 5 years after high school graduation. A more detailed overview of Project TALENT is presented in Section V.

Identification of Existing Programs Addressed to Needs of the Gifted and Talented

The actual state of education for the gifted and talented has been analyzed in terms of the data drawn from the School Staffing Survey, as presented in Section IV.

Development of Program Model

Current opinion held by experts as to the best way to educate gifted and talented children and youth has been collected by the Advocate Survey. This information is presented in the text in a manner that will aid in the making of decisions on model program development.

THE SURVEYS

Advocate Survey

The Advocate Survey instrument, a 24-page questionnaire, was designed to distill the thinking of the leaders and influential professionals in the field of education for the gifted into as concise and manageable a format as possible. The specific objectives of the survey were

a. To develop a useful definition of gifted and talented that might be widely accepted

b. To determine the need for differentiated education programs for the gifted and talented

c. To establish a model for the education of the gifted and talented

d. To determine procedures for implementing effective programs for the gifted and talented.

The survey response rate was 91%.

School Staffing Survey

The School Staffing Survey of April 1970 is a three-part inventory of a representative sample of U.S. public schools. The purpose of the survey was to provide the National Center for Educational Statistics with statistical data needed to present an overall picture of various characteristics of U.S. elementary and secondary schools. Information on staffing patterns, provisions for instruction of handicapped pupils, teacher turnover, and other similar items was collected.

Of the three questionnaire forms used in the survey, only one figured in this analysis—namely, Form Y, which covered programs provided for 11 different types of exceptional children. Mentally gifted pupils were the fourth type of exceptional children referred to, and the only group not considered "handicapped." The questionnaires were addressed to the school principals.

Results of the School Staffing Survey have been interpreted by several consultants suggested by the USOE. Their comments can be found in Supplement A to this report.

FINDINGS AND CONCLUSIONS

The findings of this study reflect current thought as well as the most reliable "hard" data concerning differentiated education for gifted and talented children and youth. Conclusions will be drawn from this information by the experts in the field (as illustrated in Supplement A). ORI's role has been limited to the design, collection, and display of the information.

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I. INTRODUCTION

OVERVIEW

1.1 The press of an expanding, technology-oriented society is being felt throughout the United States. As automation obviates an increasing number of jobs for lesser skilled workers, the new openings it creates require ever more sophisticated skills and training. The U.S. Office of Education (USOE) recognizes these new demands and the resulting need to develop each citizen's potential to the maximum. It recognizes that each person's contribution to self and society is directly influenced by the educational system, and that the system therefore must be oriented toward fulfilling the individual educational needs of all our children and youth.

1.2 To meet this requirement the spectrum of needs must be defined and means found for identifying them in individuals. This is already being done to some extent for the vast majority of children. Special programs have been developed to deal with the particular needs of the deaf, blind, physically handicapped, and gifted and talented, among others. Programs for the handicapped have long been supported by the Bureau of Education for the Handicapped. This agency administers Federal aid to such programs and evaluates their adequacy and progress, in cooperation with state special education agencies. It should be noted, however, that special programs for the gifted and talented stand out as having no Federal supporting agency. There is little specific Federal aid for such projects and there are no universal evaluation criteria. In fact, there is no set of widely used, standard definitional criteria by which gifted and talented students can be identified.

BACKGROUND

Legislative Mandate

1.3 The Commissioner of Education is required by the Elementary and Secondary Amendments of 1969 (PL 91-230, Title VIII, Section 806) to report to Congress on or about April 13, 1971 on the needs for educational programs for gifted and talented children and youth (G&TC&Y). The report must

- Show the extent to which special education assistance programs are necessary or useful to meet the needs of G&TC&Y
- State which existing Federal educational assistance programs are being used to meet the needs of G&TC&Y
- Evaluate how existing Federal educational assistance programs can be used more effectively to meet these needs
- Recommend which new programs, if any, are needed to meet these needs.

1.4 Responsibility was given to the Deputy Assistant Secretary for Planning, Research, and Evaluation (DASPRE), by the Commissioner, to determine the nature and extent of available information, to plan such studies as were indicated,and to carry out all activities necessary to the development and preparation of the report to Congress. DASPRE developed a plan for the study that drew broadly from (a) previously completed statistical surveys, (b) a review of current research, (c) expert consultation, and (d) the operating offices of the USOE. This approach was approved by the Acting Commissioner of Education on September 8, 1970.

Early Steps in Organization

1.5 An ORI report entitled, "A Review of Office of Education Data Concerning Gifted and Talented Children" (September 1970), identified data available from USOE that would be useful in analyzing programs for the gifted and talented. It also identified significant gaps in the existing data and recommended ways of filling these gaps.

1.6 The Commissioner of Education's Conference on Implementation of the Gifted and Talented Children's Educational Assistance Amendments (September 14-15, 1970), decided on the basic procedures to be followed in the analysis of the educational needs of gifted and talented children and youth. The conference, attended by many experts in the field, recommended a three-pronged approach: public hearings on education for the gifted and talented, analysis of the USOE delivery system, and collection of data from national surveys. ORI was involved in the data collection effort,which included analysis

of an Advocate Survey, the School Staffing Survey, and Project TALENT, briefly described below.

- The Advocate Survey was designed to determine the current thinking of the leaders in special education for the gifted and talented, as to the nature of these pupils' educational needs and the responsiveness of their educational system. A 25-page questionnaire was sent to 239 experts in the field.

- The School Staffing Survey includes 1969-1970 school data acquired from elementary and secondary school principals concerning staffing and the services available to the children and youth in their schools. The survey includes a representative sample of U.S. schools and pupils.

- Project TALENT is a longitudinal study of 400,000 students who were in high school (grades 9-12) in 1960. Data are available from one questionnaire administered in 1960 and two follow-up studies conducted 1 year and 5 years after graduation. A large number of G&TC&Y participated, and a broad range of data have been collected on achievement, social influences and development, intellectual ability, etc. The study parameters have been narrowed to 40 variables of special interest in defining the academically gifted child. Comparisons will be made between intellectually gifted and intellectually average students.

1.7 ORI's charge, then, was to obtain and carefully review the information from the School Staffing Survey and Project TALENT, identifying the significant elements with the help of consulting experts, to supplement that information through a survey of leaders in education for the gifted and talented, and to organize the entire body of data in the most meaningful way possible. The effort also was to have included analysis of the Belmont Pupil Centered Instrument (PCI); however, repeated delays in the preparation of the PCI data precluded their use in this study. The specific intent of this report is to present information in an unbiased manner. Every attempt has been made to screen out interpretation by the project personnel, while facilitating interpretation by the reader.

1.8 Suggested interpretations by three experts in the field are offered in a supplement to this report, "Consultant Interpretation of Findings." The consultants' comments focus on the School Staffing Survey because of the difficulty in interpreting the significance of its data.

REPORT ORGANIZATION

1.9 The report is presented in a format designed to permit readers to scan the material rapidly and select the information and level of detail suitable for their individual needs. Section II contains a rationale for the analysis plan, while Sections III and IV present specific findings from the Advocate Survey and the School Staffing Survey, respectively. Section V gives an overview of the findings from the Project TALENT comparisons.

1.10 The summary and conclusions in Section VI reflect briefly upon the analysis and suggest further government involvement. The appendices contain specific procedural documentation on each study as well as a brief description of the Belmont PCI analysis plan.

II. ANALYSIS PLAN

INTRODUCTION

2.1 Selecting information and presenting it in a format that will facilitate interpretation by experts requires several major operations:

- Designation of questions to be answered
- Definition of information required to answer questions
- Detailing of operations needed to obtain needed information
- Isolation and display of relationships of significant variables.

2.2 In cooperation with the U.S. Office of Education (USOE), ORI outlined the information requirements for the present study in terms of the congressional mandate. A specific set of operations was required to obtain each type of information. The specific operations can be subsumed under the following tasks:

a. Define gifted and talented

b. Identify special needs of the gifted and talented (academic, social, and psychological)

c. Determine the availability and adequacy of any programs currently operating

d. Develop a model program to meet the needs of the gifted and talented

e. Develop implementation plans based on program priorities, additional resources needed to provide adequate programs on a national scale, and the desired level of Federal involvement.

2.3 Information needed to accomplish these tasks was supplied primarily by the School Staffing Survey, The Advocate Survey, and Project TALENT data. Although the data in some instances may be less than ideal, they are often all that are available and will have to be used until further information bases can be developed. 1/ For example, under task (e), develop implementation plans, the first subtask is to identify sources of support for and opposition to differentiated education for gifted and talented children and youth (G&TC&Y). This was accomplished by asking the "advocates" to estimate the amount of support that could be expected from the public as a whole, from voters, and from professional educators. Although the advocates' estimate may be a rough approximation of the actual amount of support found in each of these groups, it is the only information currently available to answer the question.

ANALYSIS FRAMEWORK

2.4 A logic flow diagram of the overall analysis framework is provided in Figure 1. Detailed diagrams for four of the more complex steps in the analysis follow. In all five figures, the letters in the lower left corner of the boxes indicate the data sources for that particular item. Discussion of the validity of the data on particular items can be found in the appendices to this report.

2.5 The tasks shown without notation in Figures 1-5 are tasks that should be accomplished before an effective differentiated program for G&TC&Y can be implemented, although they could not be accomplished within the limited scope of this study. The unlettered tasks are included primarily to provide a view of the whole process of developing a program of differentiated education for the gifted and talented. It was this framework which we used to plan the overall study design.

Definition of Gifted and Talented

2.6 The first task in the analysis was to develop on operational definition of gifted and talented. The lack of a common understanding of what or who is included in the terms "gifted" and "talented" often has been a stumbling block to research in this field (the present project not excepted). Difficulties were encountered in preliminary analysis of the School Staffing Survey because of apparent differences among school principals concerning the scope of the terms

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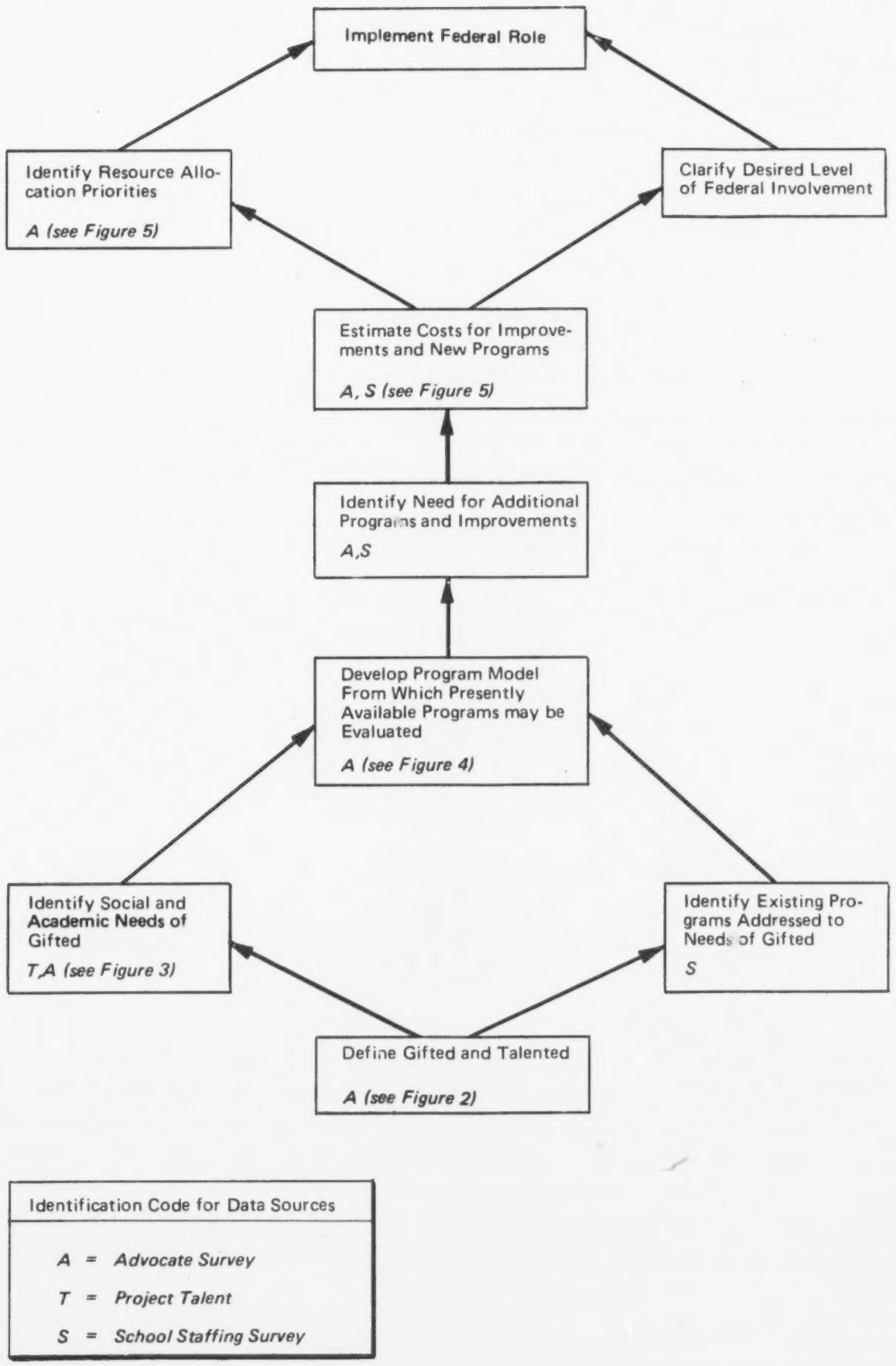
1/ Suggestions concerning the need for better information systems can be found in Section VI, "Conclusions and Recommendations."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Define Gifted and Talented
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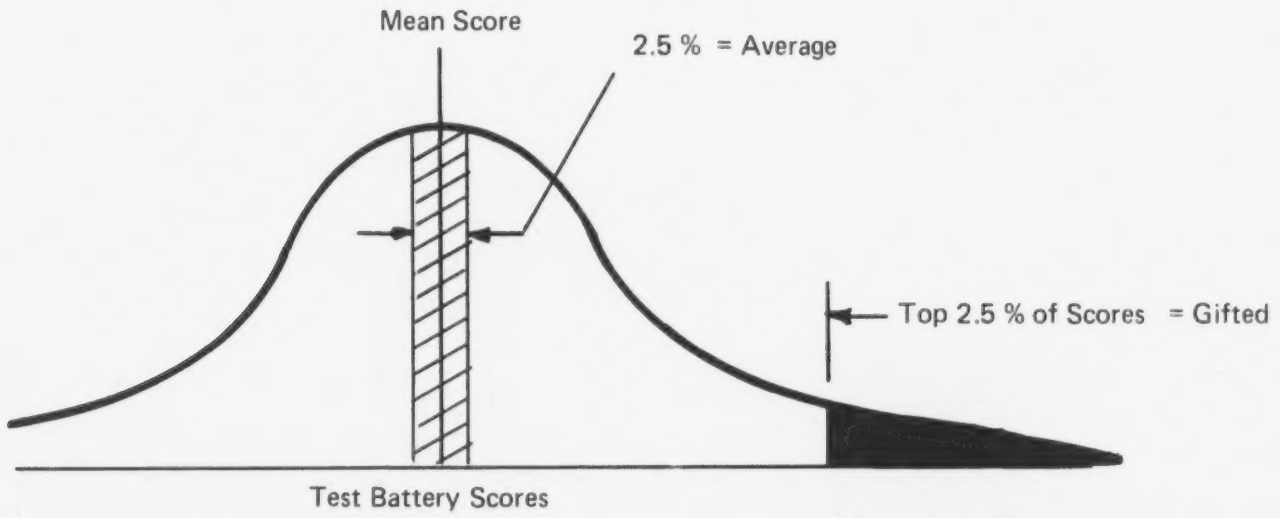
Identification Code for Data Sources
A = Advocate Survey
T = Project Talent
S = School Staffing Survey

FIGURE 1. SUMMARY OF INTEGRATED ANALYSIS PLAN

"mentally gifted" and "professionally qualified to work with the mentally gifted." The "talented" sample in the Project TALENT analysis had to be eliminated because of a lack of standard identification criteria. This major task of establishing a working definition was accomplished primarily through analysis of the opinions of advocates as to the scope and utility of a standardized definition of gifted and talented. The process designed by ORI for this purpose is illustrated in Figure 2. The last step, "Final Definition of Gifted and Talented," is shown as yet to be accomplished.

Identification of Social and Academic Needs

2.7 Project TALENT information will be used for this purpose. "Gifted" and "average" each were defined by score on a battery of tests of intellectual potential. The terms were operationally defined as follows: gifted = top 2.5% on either test battery; average = 1.25% on either side of the mean score for either test battery.



2.8 The substantive areas for which the samples can be compared are: personal development, social development, and academic development (see Figure 3). The initial TALENT questionnaire, with the two follow-ups, provides information about the ability of the two groups to choose careers and gives the students' personal evaluations of their choices. Other individual items relating to maturity, independence, and actual leadership experience are included.

2.9 A picture of the social development of students in the samples can be drawn from the sociability and social sensitivity scales. Comparisons can be made on how much the students participate in group activities and how much recreation they experience. Also, the age at which they started dating, and dating frequency, were compared.

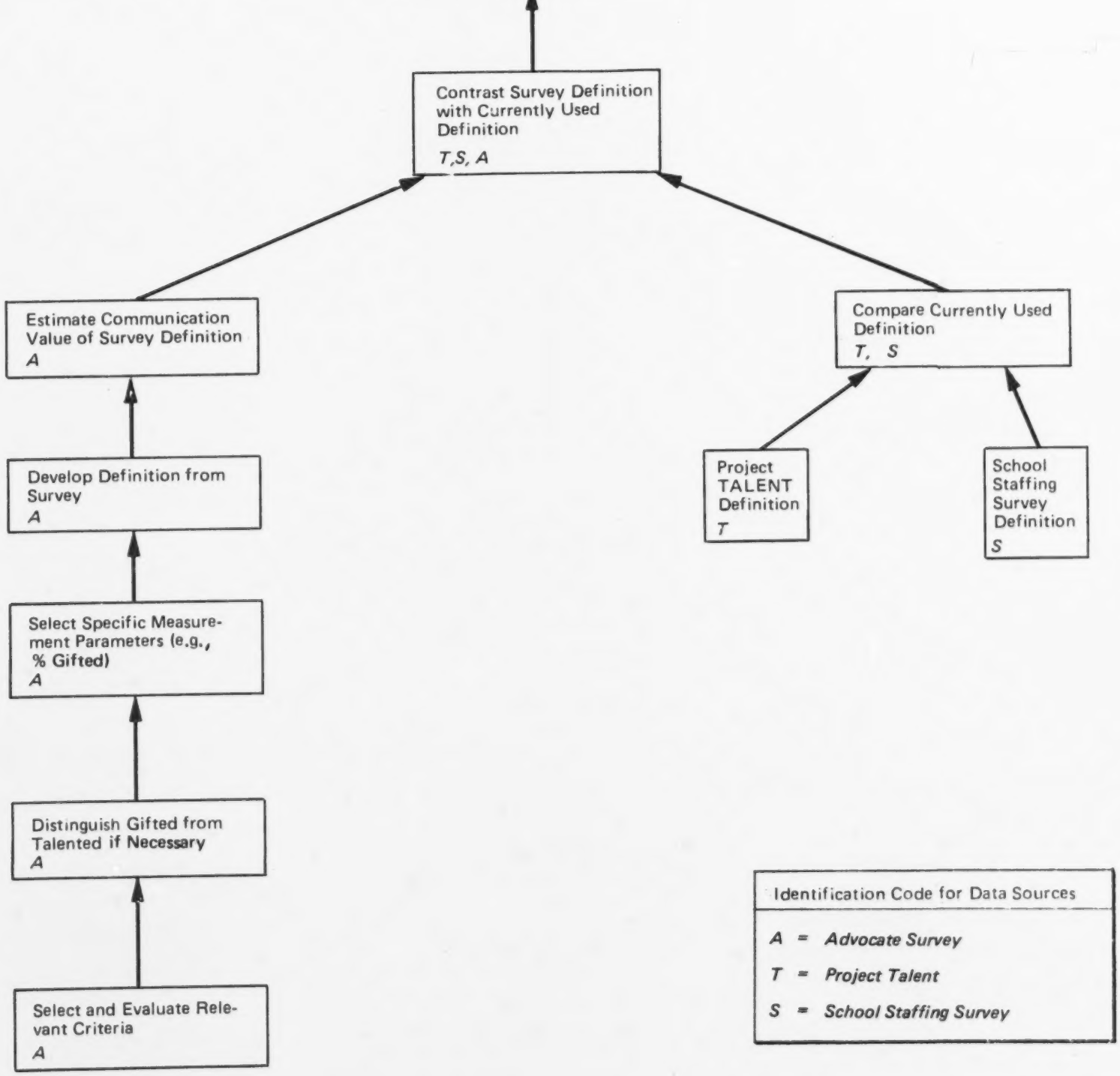


FIGURE 2. DEFINITION OF GIFTED AND TALENTED

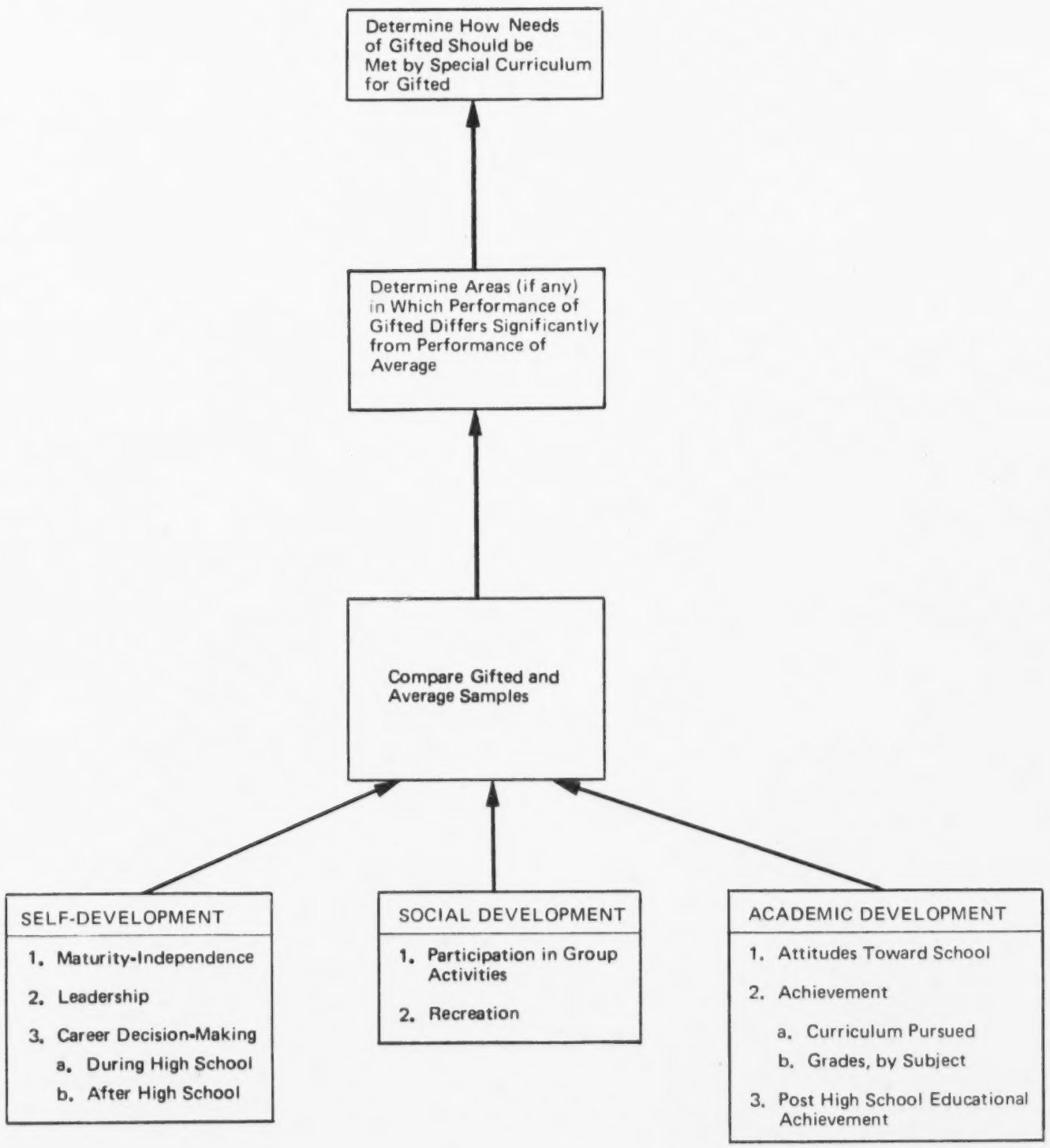

Determine How Needs of Gifted Should be Met by Special Curriculum for Gifted
Determine Areas (if any) in Which Performance of Gifted Differs Significantly from Performance of Average
Compare Gifted and Average Samples
SELF-DEVELOPMENT
1. Maturity-Independence
2. Leadership
3. Career Decision-Making
a. During High School
b. After High School
SOCIAL DEVELOPMENT
1. Participation in Group Activities
2. Recreation
ACADEMIC DEVELOPMENT
1. Attitudes Toward School
2. Achievement
a. Curriculum Pursued
b. Grades, by Subject
3. Post High School Educational Achievement

FIGURE 3. DETERMINATION OF PERSONAL, SOCIAL, AND ACADEMIC NEEDS OF GIFTED USING DATA FROM PROJECT TALENT

much recreation they experience. Also, the age at which they started dating, and dating frequency, were compared.

2.10 Academic development data are available for high school and the 5 years following high school. Perhaps the most basic data available in the TALENT surveys on this subject cover the students' scholastic attitudes. A variety of questions evaluating these attitudes are asked in the high school inventory. The students also identify their curricula (college preparatory, business, vocational, etc.) and their average grades in each subject area. The relationship between these items and the post-high-school educational achievement of eight sample groups was determined from the follow-up questionnaires. Comparisons were made between the intended level of educational attainment planned by the students and the actual level achieved 5 years after high school graduation. Their academic aptitudes as high school seniors can be compared with academic achievement and later accomplishments. A more detailed overview of Project TALENT is presented in Section V.

Identification of Existing Programs Addressed to Needs of the Gifted and Talented

2.11 The actual state of education for G&TC&Y has been analyzed in terms of the data drawn from the School Staffing Survey. Variables investigated in that project included geographic area (10 HEW areas), population density (large city, large city metropolitan surroundings, other) academic level (elementary and secondary), school size, number of gifted identified, type of special program, and staffing patterns. The details of the state of education for the gifted are presented in Section IV.

Development of Program Model

2.12 Any special needs of G&TC&Y as identified by Project TALENT and/or the Advocate Survey might well be translated into general program objectives. If, for example, one of these studies indicated that G&TC&Y have a particular problem not evident with average students, one program objective might be to develop teachers' awareness of this problem. With a set of program objectives devised, the expertise of the respondents to the Advocate Survey can be tapped to identify the procedures necessary to meet the objectives (see Figure 4).

2.13 One of the first requirements for creating a special education program, should one be needed, is to determine what administrative personnel are required to plan, establish and manage it. This information, along with the requirements and selection criteria for administrators, is presented in Section III. The next requirement for program planners might be to know how much time G&TC&Y should spend in differentiated classes. Is a part-time or a summer school program an adequate method of meeting the students' needs? Should the classes be composed entirely of G&TC&Y or should there be a mixture? Is a differentiated program especially necessary for children at a particular stage of their education? These questions should be addressed before local

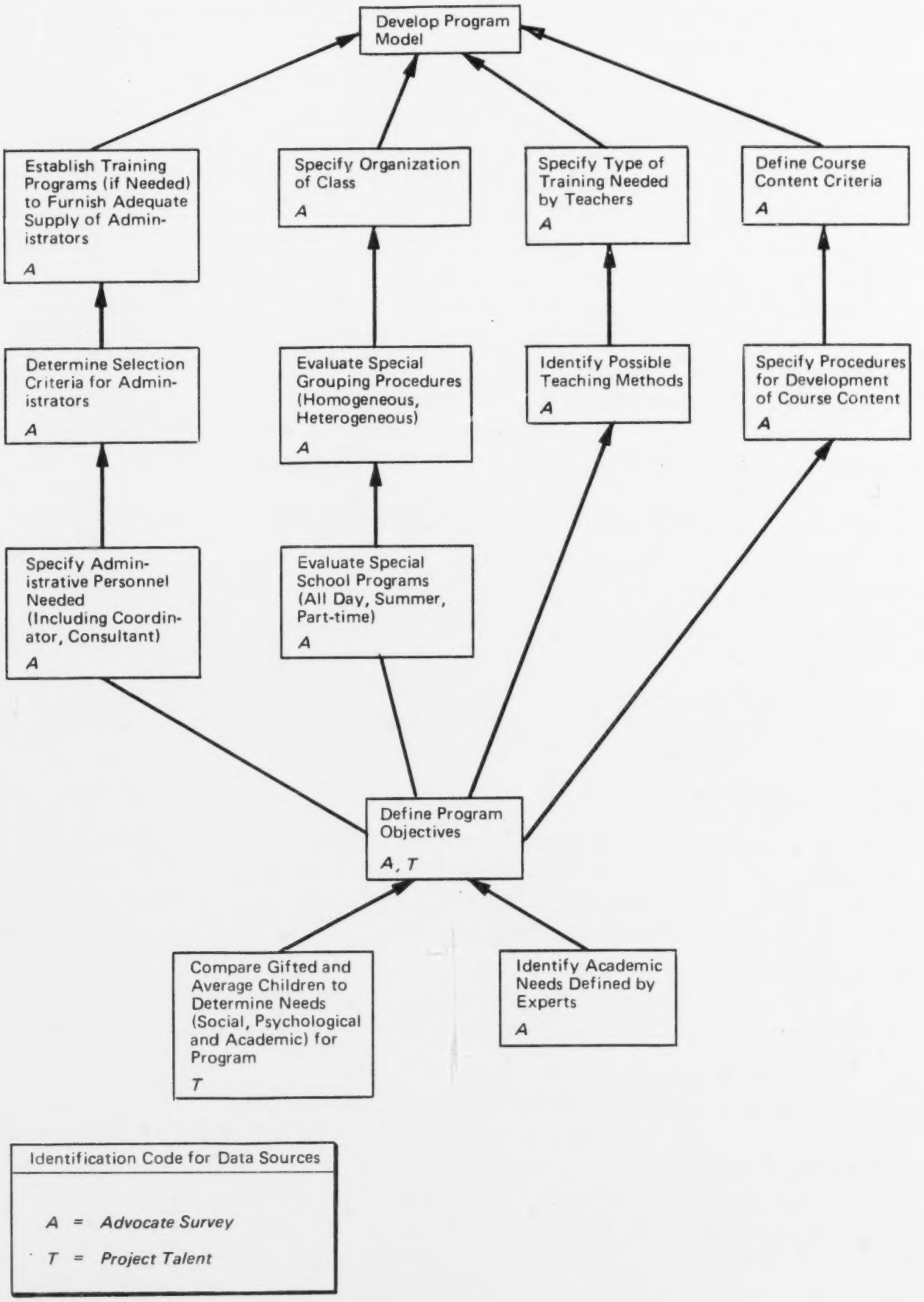


FIGURE 4. PROGRAM MODEL

educational programs are established. The advocates' opinions on these issues are presented in Section III.

2.14 All of the above aspects of program development should be considered if legislators who are considering the need for a differentiated education program for the gifted and talented are to have an adequate picture of the differences between an education program that is responsive to the needs of average students and one that meets the needs of G&TC&Y. The above information is also necessary to understand the extent to which special preparations are needed to institute differentiated programs on a nationwide basis.

Implementation Plans

2.15 Finally, the Advocate Survey furnishes information needed to determine the need for Federal assistance for differentiated education for the gifted and talented (see Figure 5). Should this support be found necessary, the tasks of implementing programs must be considered. If a need for differentiated programs can be objectively established, support for such programs for the gifted and talented should be sought from the various groups that influence the decision of whether such programs should be established. While this support is being secured, the current sources of support for and opposition to differentiated education must be identified. Because of personal involvement with this issue, respondents to the Advocate Survey are in a good position to judge the attitutdes of the various interest groups concerned. Most of them have had experience in their communities and states in stimulating interest in the particular educational needs of gifted and talented children. They know from their own experience which approaches are most successful in these efforts. This information should prove valuable in the event that a decision is made to establish new programs.

2.16 While support for programs is being stimulated, the serious jobs of estimating costs of programs, evaluating existing financial resources, and establishing program need priorities must be undertaken. On this base, a resource allocation model can be established. Such a model can be used to optimize distribution of available funds as well as to estimate the need for additional funds. These kinds of information would be helpful to back up legislative requests The Advocate Survey attempts to obtain preliminary information needed by a program implementation plan. Nevertheless, more accurate data will be needed in the future.

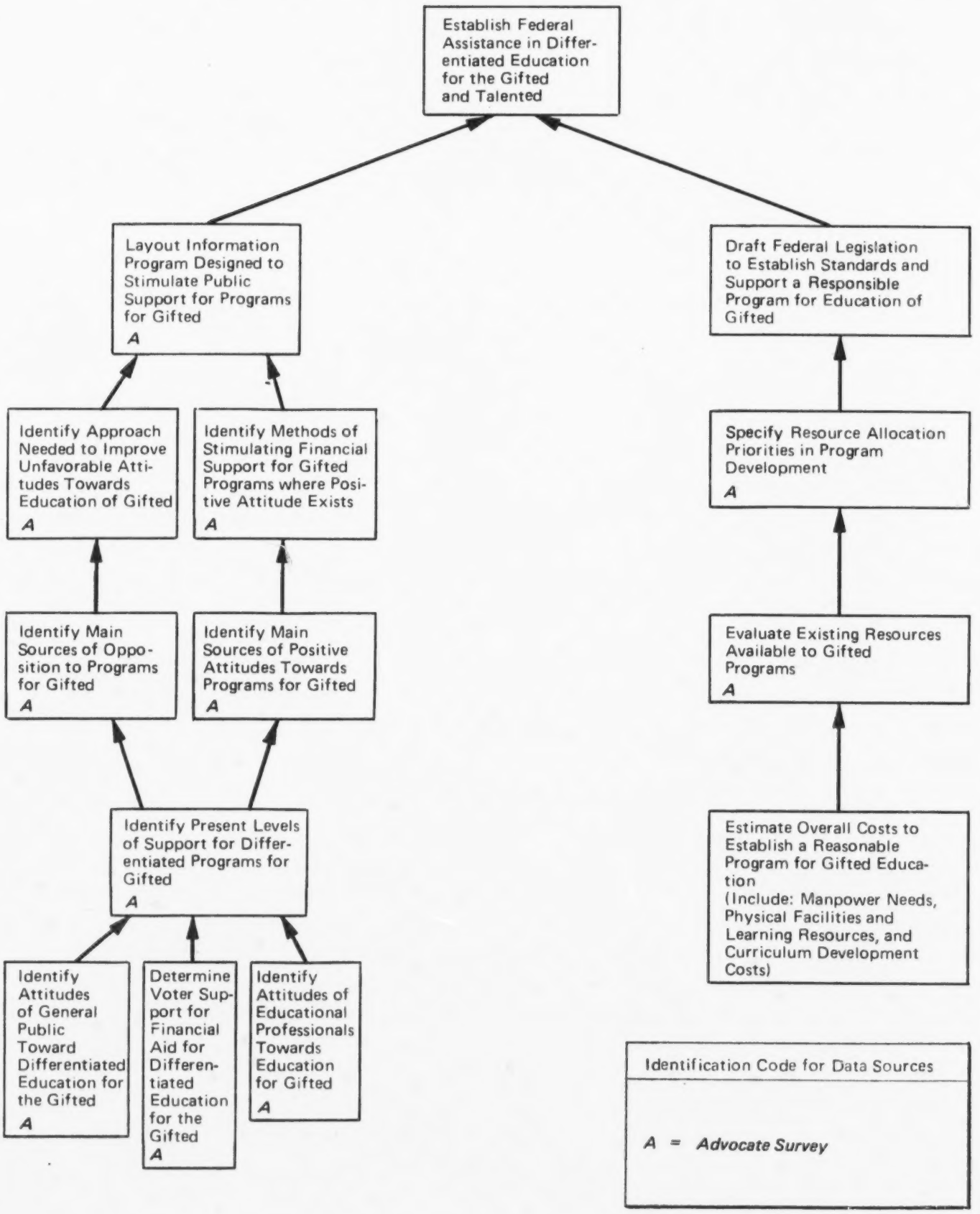

Establish Federal Assistance in Differentiated Education for the Gifted and Talented
Layout Information Program Designed to Stimulate Public Support for Programs for Gifted
A
Draft Federal Legislation to Establish Standards and Support a Responsible Program for Education of Gifted
Identify Approach Needed to Improve Unfavorable Attitudes Towards Education of Gifted
A
Identify Methods of Stimulating Financial Support for Gifted Programs where Positive Attitude Exists
A
Specify Resource Allocation Priorities in Program Development
A
Identify Main Sources of Opposition to Programs for Gifted
A
Identify Main Sources of Positive Attitudes Towards Programs for Gifted
A
Evaluate Existing Resources Available to Gifted Programs
A
Identify Present Levels of Support for Differentiated Programs for Gifted
A
Estimate Overall Costs to Establish a Reasonable Program for Gifted Education
(Include: Manpower Needs, Physical Facilities and Learning Resources, and Curriculum Development Costs)
Identify Attitudes of General Public Toward Differentiated Education for the Gifted
A
Determine Voter Support for Financial Aid for Differentiated Education for the Gifted
A
Identify Attitudes of Educational Professionals Towards Education for Gifted
A
Identification Code for Data Sources
A = Advocate Survey

FIGURE 5. IMPLEMENTATION PLAN

III. ADVOCATE SURVEY

INTRODUCTION

3.1 The Advocate Survey instrument, a 24-page questionnaire, was designed to distill the thinking of the leaders and influential professionals in the field of education for G&TC&Y into as concise and manageable a format as possible. Prior research efforts undertaken by individual educators and psychologists showed relationships between different factors or sets of factors in the development of the gifted and talented child. A problem was created, however, when conflicting findings or interpretations emerged and there was no systematic method of determining whether the conflict represented a true split in the thinking of professionals in this field or was merely an appearance of controversy generated by the dissension of one or two vocal individuals.

3.2 A broad, systematic approach was required to determine the needs of the gifted and talented and the requirements of education programs for them. The Advocate Survey is a first step toward that goal. Its general purposes were to identify areas in which there is a consensus of opinion among the leaders in the field and to reveal the "grey areas" in which more research is necessary. The major objectives of the survey were:

a. To develop a useful definition of gifted and talented that might be widely accepted

b. To determine the need for differentiated educational programs for G&TC&Y

c. To establish a model for the education of G&TC&Y

d. To determine procedures for implementing effective programs for G&TC&Y.

3.3 The survey covered most aspects of program planning and operation, including the practical matters of identifying items that need funding and determining what must be done to get funds.

Response Rate

3.4 The Advocate Survey was sent to a total of 239 professionals in education for the gifted and talented from all 50 states. Each of these individuals was nominated by peers as a leader in the field. Of the original 239 in the sample, 14 did not receive a questionnaire, usually because they had moved and could not be located. Of the remaining 225 persons who actually received the survey form, 6 returned it unanswered and 15 failed to return it in time for tabulation. The remaining 204 respondents apparently spent considerable time (at least 3 to 5 hours) completing the questionnaire. This number represents slightly over 90% of those who received a questionnaire and 85% of the original sample.

3.5 Many of the respondents made an effort beyond the minimum requested to carefully detail their thoughts on particular questions. Selected quotations from notable responses to open-ended questions are presented with the appropriate sections of the study findings.

Occupations of Respondents

3.6 The most common occupation among the respondents to the Advocate Survey was professor or researcher for G&TC&Y. About half of the 204 respondents (45%) identified themselves as university professors. In addition, some of those who identified themselves as consultants to state or local school systems also are university faculty members. The proportion of respondents who are actually professors specializing in the field of education for G&TC&Y is therefore slightly higher than the 45 % represented on the first table.

3.7 The next most frequent occupation was state government administrator (16%). Most of these individuals are state directors of special education; a few are state coordinators of programs for G&TC&Y. Administrators in local government or local school districts represent almost 10% of the sample. This group primarily includes coordinators or directors of city or county programs for G&TC&Y. The last major group of respondents, about 15%, consists of consultants for education of G&TC&Y to state or local school systems. As was mentioned above, some members of this group are also university professors who preferred to consider themselves consultants for G&TC&Y. The final 15% of the respondents represent a variety of groups, including principals or headmasters of schools for G&TC&Y and teachers and psychologists working with G&TC&Y.

3.8 In addition to being asked to state their occupations, respondents were asked if they presently serve as coordinators or consultants for any

educational agency. Those holding such positions were asked to give their titles. These responses were screened so that only those consultants or coordinators concerned primarily with the gifted and talented were counted. A state director of special education, for example, was not included as a coordinator for G&TC&Y, even if he considered himself to be one. Almost half of the respondents (88, or 43.14%) serve state or local education agencies as coordinators or consultants for G&TC&Y. The largest subgroup in this total (36) is composed of coordinators/directors of programs for local school districts. Another 18 are consultants to state departments of education, and 15 are consultants to local school districts.

RESPONSE RATE AND RESPONDENT OCCUPATION TABULATIONS

LEADERSHIP SURVEY RESPONSE RATE

Description	Number
Original Sample	239
Disqualified (Moved-no Forwarding Address, Misidentified as Expert, Deceased)	−14
Total Possible Replies	225
Refusals	−6
Not Returned	−15*
Total Questionnaires Received	204
Return Rate:	
Of Total Possible Replies	90.88%
Of Original Sample	85.35%

*This figure includes 2 questionnaires which were returned after tabulations were completed and were therefore not included in our calculations.

POSITION OF RESPONDENT

Position	Frequency	Percent
Professor or Researcher	92	45.10
Administrator in State Government	33	16.18
Administrator in Local Government or School District	20	9.80
Consultant to State (Gifted)	15	7.35
Consultant for Gifted to Local School District	15	7.35
Principal or Teacher	14	6.86
Officer in Statewide Association for Gifted	7	3.43
Administrator in Private National Association	1	0.49
Federal Government Administration	1	0.49
Psychologist	3	1.47
Other	2	0.98
Not Ascertainable	1	0.49
Total	204	100.00

Are you presently serving as coordinator or consultant to any educational agency ?

..... **Yes** ☐ ..... **No** ☐

If yes, please identify the agency (or agencies) and your title(s) or position(s).

Answer/Type of Agency	Total		"Yes" Subtotal	
	Frequency	Percent	Frequency	Percent
No	100	49.02		
Not Ascertainable	16	7.84		
Yes:	88	43.14		
State Coordinator			15	7.35
Coordinator for Local Education Agency			36	17.65
State Consultant			18	8.82
Consultant for Local Education Agency			15	7.35
Other Consultant			10	4.90
Total	204	100.00	94 *	46.07

* A few respondents were associated with more than one type of agency; thus "yes" frequency subtotal (94) is greater than yes total (88).

3.12 Nearly 85% of the respondents agreed that the following should be considered professionally qualified to identify G&TC&Y: school psychologists, guidance counselors, teachers, artists and musicians, and others who can appraise pupils' competencies in special areas of talent. School administrators and curriculum specialists were acceptable to only half of the respondents.

3.13 An open-ended question in which the respondents were specifically asked "Who should be responsible for identification of gifted and talented students in a school district?" elicited similar responses. Most frequently mentioned was the psychologist or the psychological services staff (38%). "All personnel involved" was suggested by 27% of the respondents. Teachers and district coordinators for the gifted were mentioned by about 25% of the respondents. Since most of the respondents gave more than one answer, and many who gave just one answer called for a team effort, it seems evident that most respondents would like to rely on more than a single person's judgment in identification of G&TC&Y.

Incidence of G&TC&Y in School Population

3.14 When asked to specify what percentage of the average school population they would consider to be gifted and talented, 80% of the respondents said that these children would represent 15% of the students or less. Half of the 80% (about 43% of the total) said that 5% or less of the average school population should be considered gifted and talented; the other half (38% of the total) placed the proportion of gifted and talented students somewhere between 6% and 15%.

3.15 Approximately two-thirds of the respondents said that they personally distinguish between gifted and talented. They regard as gifted, pupils who have superior intellectual ability, while talented pupils are primarily considered to be those with skills in particular areas, such as art or music. Among the respondents who made this distinction, two-thirds felt it should be considered in planning curricula. Of those who differentiated between gifted and talented, 82% considered gifted to be 5% or less of the average school population, while only about half of those who differentiated between the groups considered 5% or less of the population to be talented. Another 33% of the respondents said that thetalented represent 6% to 15% of the population.

Critique of Definition Presented

3.16 More than half of the respondents did not have any additional suggestions or critical comments about the definition as presented. Those who did comment generally included individual thcughts not expressed by many other respondents. The most common single suggestion, voiced by 11% of the respondents, was that the definition needs more subdefinitions, including itemization of specific talents. Only about 20% of the respondents felt that the definition as presented would not be effective in communicating with the various groups mentioned (i.e., legislators, teachers, school administrators, lay public, etc).

SELECTED REMARKS CONCERNING DEFINITION AND IDENTIFICATION FROM RESPONDENTS

"The concept of psychometric giftedness frequently determines not only the type of programs offered but also the operational definition itself. If a biased definition is used, multivariate approaches will in all probability be attempted."

"Criteria will vary with a program. It is stupid to identify a group before (and without considering) a specific treatment and what it requires."

"You must write in, and practice, flexibility both in the definition of gifted and in the program design itself. No definition will be so perfect that it includes all the gifted and excludes all the non-gifted."

"The lay public may need to be taught that the gifted are handicapped in a society that denies them an environment in which their gifts can lead to high performances."

"For classroom teachers, the notation should be made that the 'gifted child' is not necessarily neat, clean, white, or conforming in manner."

". . . (administrators) need professional guidance and a set of indicators reflecting the definition. Administrators tend to confuse giftedness with conformity to prescribed tasks, i.e., the "A" student."

"The teachers should be reevaluated."

"I am distressed by 'the regular school program!' As long as programs for the gifted are seen as being 'added on' to this antiquated, undefensible, undemocractic structure we miss a chance to make education appropriate to children of all abilities. If this definition helps us really break through existing structures, attitudes, and procedures then we've made a terrific move. If we view this definition as a chance only to get a piece of the budgetary action (what's good for the retarded is good for the gifted-dollarwise), we blow it."

"The top 5% of children in any intellectual artistic dimension should be identified, and if possible, they should be given more stimulation in support of their areas of talent. I see no need for refined definitions of 'talented' or 'gifted.' A school district can devote only so many resources to special education, and they ought to be used for whatever proportion of the small top group can be handled. Never mind the definition—just try to get extra support and stimulation to the youngsters who have the potential for real contribution to our society—whether they be math, art, drama, social sciences, educational, or other in their direction of development."

"Just as we do not <u>know</u> how high "high performance" can go, we do not <u>know</u> how broad identifications can be. Those responsible for identification should involve themselves continually in training, observing, re-assessing. The purpose of a definition is partly to limit. There really should be <u>no</u> limit to the talent search nor to the opportunities provided for the identified gifted-talented children."

"Perhaps as an addendum to the definition, a phrase stating that many of these children fail in school unless different programs are provided. Thus it is not just to reach their 'full' potential, but to do as well as the average child, that different programs are needed."

"Giftedness should be recognized as a multi-faceted dimension. It includes several parallel types of talent and extraordinary ability and each should be recognized as having its own importance. The term should include not only the exceptionally high learning type but those possessing a comparatively high degree of such other abilities and talents which are not readily identified in group ability and achievement tests."

"Gifted and talented tend to be interpreted as handed down (hereditary) gifts. I use superior student, emphasizing thereby that the student has demonstrated that he can learn well and with some implication that he has demonstrated effort—even if sometimes his efforts may seem obnoxious."

"Professionally qualified personnel is a nebulous term. I would like to see it more spelled out, more emphasis placed on the role of the classroom teacher, and less on ancillary personnel."

TABULATED RESPONSES CONCERNING
DEFINITION AND IDENTIFICATION OF G&TC&Y

Children "capable of high performance" should include those with high:

High Performance Characteristics	Yes		No		Not Ascertainable		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Underdeveloped Potential	178	87.25	19	9.31	7	3.43	204	100.00
General Intellectual Ability	187	91.67	13	6.37	4	1.96	204	100.00
Specific Academic Aptitude	184	90.20	12	5.88	8	3.92	204	100.00
Creative or Productive Thinking	197	96.57	2	0.98	5	2.45	204	100.00
Leadership Ability	150	73.53	41	20.10	13	6.37	204	100.00
Social Adeptness	104	50.98	78	38.24	22	10.78	204	100.00
Ability in Visual and Performing Arts	172	84.31	23	11.27	9	4.41	204	100.00
Psychomotor Ability	107	52.45	75	36.76	22	10.78	204	100.00
Other	31	15.20	0	–	173	84.80	204	100.00

What minimum criteria should be used to identify gifted and talented children ?

Minimum Criteria	Not to be Used		Rarely Used		Important		Essential		Not Ascertainable		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Group Intelligence Test	17	8.33	42	20.59	109	53.43	24	11.76	12	5.88	204	100.00
Individual Intelligence Test	5	2.45	8	3.92	84	41.18	100	49.02	7	3.43	204	100.00
Achievement Tests (Standard)	7	3.43	35	17.16	114	55.88	37	18.14	11	5.39	204	100.00
Achievement Tests (Local)	19	9.31	82	40.20	67	32.84	20	9.80	16	7.84	204	100.00
Teacher Judgment	5	2.45	36	17.65	118	57.84	36	17.65	9	4.41	204	100.00
Professional Talent Evaluation	7	3.43	22	10.78	93	45.59	70	34.31	12	5.88	204	100.00
Demonstrated Achievement	4	1.96	27	13.24	110	53.92	50	24.51	13	6.37	204	100.00
Psychologists' Evaluation	9	4.41	27	13.24	97	47.55	57	27.94	14	6.86	204	100.00
Apparent Psychological Adjustment	33	16.18	68	33.33	70	34.31	13	6.37	20	9.80	204	100.00
Creativity Test	6	2.94	28	13.73	112	54.90	39	19.12	19	9.31	204	100.00
Other: *Aptitude Test for Talented*	0	–	0	–	5	2.45	4	1.96	195	95.59	204	100.00
Other: *Peer Judgment*	0	–	0	–	5	2.45	4	1.96	195	95.59	204	100.00
Other: *Parents' Judgment*	0	–	0	–	6	2.94	4	1.96	194	95.10	204	100.00

Persons "professionally qualified" to identify gifted and talented children should include:

Professions	Yes		No		Not Ascertainable		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Teachers	174	85.29	19	9.31	11	5.39	204	100.00
School Administrators	104	50.98	81	39.71	19	9.31	204	100.00
School Psychologists	198	97.06	1	0.49	5	2.45	204	100.00
Guidance Counselors	174	85.29	18	8.82	12	5.88	204	100.00
Curriculum Specialists	99	48.53	86	42.16	19	9.31	204	100.00
Artists, Musicians, and Others Qualified to Appraise Pupils' Competencies in a Specialized Area of Talent	188	92.16	9	4.41	7	3.43	204	100.00
Other	49	24.02	0	–	155	75.98	204	100.00

Who should be responsible for the identification of gifted and talented students in a school district ?

Person Responsible	Frequency	Percent
Individual Teachers	49	24.02
Individual Principals and Other Administrators	26	12.74
Individual Guidance Counselors	24	11.76
Coordinator/Consultant for Gifted in District	48	23.53
All Personnel Involved	56	27.45
Local Research Offices	1	0.49
Psychological Services Office/or Psychologist	78	38.24
Professional Artists	7	3.43
Peers	1	0.49
Director of Special Education	4	1.96
Other	20	9.80
Not Ascertainable	9	4.41
Total	323*	158.33

*Total exceeds 204 because three answers could be given by each respondent. Percent is based on 204.

What percentage of the average school population would you consider as gifted and talented ?..... _____%

Percentage Gifted and Talented	Frequency	Percent
Less Than 1%	0	—
1-2%	21	10.29
3-5%	67	32.84
6-9%	17	8.33
10%	35	17.16
11-15%	25	12.25
16-20%	12	5.88
21-25%	5	2.45
Over 25%	12	5.88
Not Ascertainable	10	4.90
Total	204	100.00

For the purpose of curriculum planning, do you think that gifted and talented should be defined separately ?.....**Yes** ☐ .....**No** ☐

If yes, approximately what percentage of the average school population would you categorize as:

Gifted ? ....._____%

Talented ? ....._____%

Differentiation of Gifted and Talented	Total		"Yes" Subtotals for Gifted		"Yes" Subtotals for Talented	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Not Ascertainable	5	2.45				
No	65	31.86				
Yes:	134	65.69				
Less Than 1%			3	2.24	1	0.75
1-2%			48	35.82	25	18.66
3-5%			59	44.03	39	29.10
6-9%			7	5.22	17	12.69
10%			7	5.22	15	11.19
11-15%			4	2.99	14	10.45
16-20%			1	0.75	8	5.97
21-25%			1	0.75	22	1.49
Over 25%			0	–	4	2.99
Not Ascertainable			4	2.99	9	6.72
Total	204	100.00	134	100.00	134	100.00

Do you personally distinguish between gifted and talented ?

..... **Yes** ☐ .....**No** ☐

If yes, how do you differentiate them ?

Differentiation of Gifted and Talented	Total		"Yes" Subtotal	
	Frequency	Percent	Frequency	Percent
No	56	27.45		
Not Ascertainable	8	3.92		
Yes:*	140	68.63		
Gifted Have Superior Intellectual Ability; Talented Have Skill in a Particular Area			92	65.71
Gifted Have Superior Intellectual Ability Compared to Talented			7	5.00
Gifted Have Superior Ability in any Area Compared to Talented			4	2.86
Gifted Superior in all Fields; Talented Skilled in Particular Area			16	11.43
Gifted Have High Academic Ability; Talented Have High Ability in Many Fields			3	2.14
Gifted Have General High Potential; Talented Have Actualized Potential			4	2.86
Consider Only Gifted; Avoid Distinction of Talented			2	1.43
Other			7	5.00
Not Ascertainable			8	5.71
Total	204	100.00	143	102.02

*Three possible answers.

Please add here any further comments you have on the overall usefulness of the operational definition as you have refined it in the above questions.

Further Comments	Frequency	Percent
Definition Good, Adequate, etc.	11	5.39
Definition Needs More Subdefinitions, Including Specification of Talents	23	11.27
"Gifted" and "Talented" should be Defined Separately	15	7.35
Creativity Should be Included in Definition	7	3.43
Definition Should be Broader	17	8.33
Definition Should Make Allowances for Different Cultural Backgrounds	6	2.94
Definition Should Specify Approximate Percentage of Students	3	1.47
Other	28	13.73
Not Ascertainable/No Answer	106	51.96
Total	216*	105.87

*Total exceeds 204 because some respondents gave more than one comment. Percent is based on 204.

Would the operational definition be effective in communicating with administrators in general education, teachers, legislators, lay public, pupil personnel service staff ? If no, what modifications would be needed to facilitate communication ?

Definition Effectiveness	Administrators in General Education				Teachers				Legislators				Lay Public				Pupil Personnel Services Staff			
	Total		"No" Subtotal		Total		"No" Subtotal		Total		"No" Subtotal		Total		"No" Subtotal		Total		"No" Subtotal	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Not Ascertainable	3	1.47			2	0.98			4	1.96			7	3.43			3	1.47		
Yes	145	71.08			146	71.57			118	57.84			113	55.39			156	76.47		
Do Not Know	18	8.82			18	8.82			38	18.63			39	19.12			18	8.82		
No – Modifications	39	18.63			38	18.63			44	21.57			45	22.06			27	13.24		
Specify Approximate Percent of Students			0	–			0	–			6	13.64			2	4.44			1	3.70
Unnecessary to Specify Parameters			0	–			0	–			0	–			0	–			1	3.70
Need More Specific Description of Gifted and Talented			14	36.84			13	34.21			15	34.09			16	35.56			12	44.44
Specify High Performance			4	10.53			4	10.53			2	4.55			3	6.67			0	–
Separate Definitions for Gifted and Talented			5	13.16			3	7.89			5	11.36			5	11.11			2	7.41
Specify Qualified Personnel			0	–			0	–			1	2.27			1	2.22			1	3.70
Specify Different Education Programs			3	7.89			3	7.89			5	11.36			5	11.11			2	7.41
Gifted are Subdivision of Talented			1	2.63			0	–			0	–			0	–			0	–
Other			5	13.16			8	21.05			3	6.82			5	11.11			5	18.52
Not Ascertainable			6	15.79			7	18.42			7	15.91			8	17.78			3	11.11
Total	204	100.00	38	100.00	204	100.00	38	100.00	204	100.00	44	100.00	204	100.00	45	100.00	204	100.00	27	100.00

How often should screening for gifted and talented be held ? *(check one)*

Frequency of Screening	Frequency	Percent
Weekly	2	0.98
Monthly	5	2.45
Semiannually	46	22.55
Annually	83	40.69
Unscheduled	38	18.63
Every 3 Years	1	0.49
Continuously	25	12.25
Other	1	0.49
Not Ascertainable	3	1.47
Total	204	100.00

Should children selected for the program be reevaluated ? .....**Yes** ☐ .....**No** ☐

If yes, how often ?_____

Reevaluation of Children	Total		"Yes" Subtotal	
	Frequency	Percent	Frequency	Percent
Not Ascertainable	2	0.98		
No	6	2.94		
Yes:	196	96.08		
Weekly			1	0.51
Monthly			3	1.53
Semiannually			31	15.82
Annually			67	34.18
Unscheduled			35	17.86
Every 3 Years			22	11.22
Continuously			26	13.27
Other			3	1.53
Not Ascertainable			8	4.08
Total	204	100.00	196	100.00

SPECIAL PROGRAM NEEDS OF THE GIFTED AND TALENTED

3.17 This section covers the survey questions that were designed to permit evaluation of the needs of G&TC&Y as contrasted with the needs of average children and youth. Further description of the operation of programs for the gifted is contained in the next section, "Program Model."

3.18 The items in this section were presented as concept statements. The respondents were asked to choose among three possible evaluations of each statement: "Not True or Not Important," "Fairly Important," "Essential." The responses reflect a high level of consensus, with only three concepts rated as "Not True or Not Important" by more than 15% of those responding.

3.19 The most widely endorsed concept was: "Program content for gifted children should be geared to accommodate their more rapid intellectual growth." Nearly every respondent rated that concept as either important or essential. There was also broad agreement that "Gifted children should be expected to perform at higher levels of complex thinking than average children," and that "Large blocks of independent time are more necessary for gifted than average children." ("Gifted" in these quotations includes talented.)

3.20 More controversial were the statements that G&TC&Y need more individualized instruction, more emphasis on self-evaluation, and more emphasis on affective awareness than average children. About one-third of the respondents rejected these concepts.

TABULATED RESPONSES
CONCERNING SPECIAL PROGRAM NEEDS

Possible approaches to differentiated education for gifted and talented children.

Concept Under Evaluation	Not True or Not Important		Fairly Important		Essential		Not Ascertainable	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Gifted Children Need More Emphasis on Multiple Thinking Processes, Including Creative Thinking, Logical Thinking, and Critical Thinking, Than Average Children	16	7.84	31	15.20	153	75.00	4	1.96
Gifted Children Should be Expected to Perform at Higher Levels of Complex Thinking Than Average Children	8	3.92	50	24.51	142	69.61	4	1.96
Program Content for Gifted Children Should be Geared to Accommodate Their More Rapid Intellectual Growth	3	1.47	28	13.73	167	81.86	6	2.94
With the Gifted, Special Care Must be Taken to Foster Social as Well as Intellectual Growth	15	7.35	71	34.80	115	56.37	3	1.47
Gifted Children Need a More Enriched Learning Environment Than Average Children	29	14.22	59	28.92	112	54.90	4	1.96
Gifted Children Need More Emphasis on Self-Evaluation Than Average Children	63	30.88	78	38.24	59	28.92	4	1.96
Gifted Children Need More Emphasis of Affective Awareness Than Average Children	69	33.82	77	37.75	54	26.47	4	1.96
Large Blocks of Independent Time are More Necessary With Gifted Than Average Children	14	6.86	55	26.96	133	65.20	2	0.98
Gifted Children Need More Individualized Instruction Than Average Children	67	32.84	65	31.86	68	33.33	4	1.96
Differentiated Programs for the Gifted Need Greater Resources Than Programs for Average Students	20	9.80	41	20.10	139	68.14	4	1.96

PROGRAM MODEL

3.21 Included under this heading is the bulk of the information gathered in the Advocate Survey. The data reflect the respondents' views of the specific and practical details involved in establishing and operating a differentiated program for the gifted and talented. Over 90% of the respondents agreed that the major components of such a program should be

a. A differentiated curriculum that develops higher cognitive functioning and/or specialized talents

b. Instructional strategies and curriculum content that accommodate the learning styles of the gifted and talented

c. Special administrative arrangements to implement such strategies and curricula.

The information necessary to develop a program built on this framework is classified under four topics: program content and organization, administrative requirements, teachers of G&TC&Y, and support personnel.

Program Organization and Content

3.22 Scope and Level of Special Programs. The first major conclusion reached was that the program for G&TC&Y should extend throughout the educational experience; 95% of the respondents were in agreement on this point. They indicated, however, that if forced by financial constraints to choose priority grade levels, the preferred order would be

a. Elementary (grades 4-6)

b. Primary (grades 1-3)

c. Junior high school (grades 7-9).

3.23 Alternatives to Full-Time Programs. The respondents also were asked to suggest alternatives for school districts that have too few pupils or insufficient financial resources to establish a complete program for their G&TC&Y. The most frequently mentioned alternatives were to have special individualized instruction provided by qualified teachers and to have two or more schools or school districts combine their resources to establish a program for G&TC&Y. Other limited efforts—part-time programs, after-school programs, and summer classes—were listed in the questionnaire. Almost all respondents felt that part-time programs could be beneficial, and most agreed that a child could make some gains even if he spent no more than half of his school day in such a program. Less enthusiasm was expressed for after-school programs. Although 70% of the respondents said that after-school programs are useful, almost all of

these qualified their support by saying that this type of program should be used only to supplement a school-day program or that it is better than no program at all. The two major requirements for a successful summer program were felt to be a well-designed curriculum and teachers familiar with the special educational needs of G&TC&Y.

3.24 Grouping. When asked if homogeneous grouping is more important for G&TC&Y than average children and youth, slightly over half of the respondents agreed that it is. Of those who disagreed, most said that grouping is equally important for all children. Only about 12% of the respondents believed that homogeneous grouping is unnecessary or undesirable. The factors cited as most important to consider when grouping G&TC&Y were intellectual ability or IQ, special interest areas, particular educational needs, achievement levels, and social maturity. When asked how they define homogeneous grouping as the concept is applied to G&TC&Y, the largest group of respondents, about 40% of the total, said that homogeneous grouping is "having those with similar intelligence levels come together for all or part of the school day." One-third of the respondents felt that the grouping should be based on subject area ability or skill, which would mean, for example, that a child in a class for gifted readers might not be in a class for those gifted in mathematics or in music.

3.25 Curriculum. The specific content of any curriculum of course will depend on many considerations and will vary from program to program. There were, however, a number of questions in the survey addressed to general curriculum design and organization. Most of the respondents agreed that conventional curriculum requirements for each grade level do not have to be covered in differentiated programs for G&TC&Y. Only 6% of the respondents thought that covering such requirements would be essential. The respondents were almost unanimous in their belief that instruction should be ungraded and that the community itself could be used as a learning resource. Over 90% of the respondents also agreed that social interaction in the classroom should be stressed as much as possible and that aesthetic sensitivity should be emphasized. From a list of 10 potential program objectives presented, the greates support was expressed for the development of creativity and the stimulation of individual interest and initiative.

SELECTED REMARKS FROM RESPONDENTS
CONCERNING PROGRAM ORGANIZATION

(grouping; alternatives to full-time programs)

"I would define homogeneous grouping for the gifted as I would for any group of children. It is an administrative procedure to remove extremes (as related to general intelligence and/or interests), thus providing improved opportunity for appropriate educational environment."

"I would omit any of the above items that carry connotation of homogeneity or standardization. The thrust should be toward increasing heterogeneity and individuality in programs."

"There is no such thing as a homogeneous group of gifted children. Abandon this term, it leads to thoughtless educational practice."

"'If you walk like a duck, look like a duck and make noises like a duck, you must be a duck'." (Definition of homogeneous grouping.)

"The gifted must develop an intellectual honesty that may be missed if there are few to 'challenge' cherished but unsubstantiated opinions."

"There is no such concept as homogeneity of grouping but only variability. However, homogenous grouping attempts to bring together children with a certain set of abilities to make teaching and learning more effective."

"It is a generally accepted fact that the majority of teachers teach toward the middle. Average children, therefore, do well and survive, even with mediocre teaching. The gifted and slow learners do not thrive in a heterogeneous situation."

"Gifted students are more likely to absorb and adopt experiences to their own situations. A class visited a university computer center. Two gifted members wrote a convincing letter to the superintendent to add a course in computer science. It was added."

"Greater diversity of interests, aptitudes, and performance exists among gifted students than average children. Educational provisions for gifted can be more effective and successful when homogeneous grouping is recognized and implemented."

"Children are individuals—any grouping is done for reasons of administration, cost savings or local priorities for use of funds in other areas."

"Grouping is a 'gimmick' developed to make administration of programs easier and to solve problems caused by inadequate teachers. It is also an administrative method of maintaining larger class sizes and so meeting budget limitations."

"After-school programs are useful; however, I believe these types of programs delay the initiation, development, and improvement of needed gifted programs during the regular school day in the schools."

"Kids are kids; they need to play and relax. After-school programs make them work after a day of boredom and tend to turn them off even more to educational interests."

TABULATED RESPONSES CONCERNING
PROGRAM ORGANIZATION

A differentiated education program for the gifted and talented should be characterized by:

Characteristics of Special Education for Talented and Gifted	Yes		No		Not Ascertainable		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
A Differentiated Curriculum That Developes Higher Cognitive Functioning and/or Specialized Talents	195	95.59	4	1.96	5	2.45	204	100.00
Instructional Strategies and Curriculum Content That Accoinmodate the Learning Styles of the Gifted and the Talented	196	96.08	4	1.96	4	1.96	204	100.00
Special Administrative Arrangements To Implement Either of the Above	190	93.14	9	4.41	5	2.45	204	100.00
Other: Guidance in Personal Psychological and Sociological Development	9	4.41	1	0.49	194	95.10	204	100.00

Is it necessary to provide a continuous program or series of programs for the **gifted** child throughout the school experience ? .....**Yes** □ .....**No** □

Providing a Continuing Program	Frequency	Percent
Yes	194	95.10
No	6	2.94
Not Ascertainable	4	1.96
Total	204	100.00

If resources are limited, what is the order of priority (by level) in which differentiated programs for the **gifted** should be funded ? ***(please rank order* Number 1 = highest priority*)***

To determine the relative priority of each educational level, the following point system was used. First choice - six points, second choice - five points, etc., down to the sixth choice which was one point. The total points for each educational level were than added together and these totals were ranked to get the overall priority ranking. Highest possible score was 1,146, based on number of respondents answering the question (191).

PRIORITY RANKING

Rank	Priorities	Tabulated Score
1	Elementary (Grades 4 - 6)	964
2	Primary (Grades 1 - 3)	821
3	Junior High School (Grades 7 - 9)	802
4	Senior High School (Grades 10 - 12)	643
5	Pre Kindergarten	474
6	Post High School	257

In school districts where financial constraints or lack of a sufficient number of **gifted** pupils prevent establishment of a complete educational program for the **gifted,** what are alternative ways to meet needs of the **gifted** ?

Alternative Ways to Meet Needs of Gifted	Frequency	Percent
Individual Instruction by Qualified Teachers	81	39.71
Use Community Resource People to Help Pupils With Special Interests	27	13.24
Special Materials to be Used by Individual Gifted	19	9.31
State Extension Programs	14	6.86
Television	4	1.96
Special Group	31	15.20
Special Advanced Courses	31	15.20
Summer or After School Sessions	28	13.73
Other	15	7.35
Cooperative Use of Resources	44	21.57
Create Counselor for Gifted Children	7	3.43
Not Ascertainable	24	13.24
Total	328*	160.80

* Total exceeds 204 because three answers could be given by each respondent. Percent based on 204.

Are part-time programs useful ? *(Do not consider after-school programs as "part-time")*

.....Yes ☐ .....No ☐

If yes, what is the minimum percentage of a **gifted** student's time that must be spent during the regular school day in differentiated programs in order for them to be effective ?

Usefulness of Part-Time Programs	Total	
	Frequency	Percent
Yes	182	89.22
No	11	5.39
Not Ascertainable	11	5.39
Total	204	100.00

Minimum Percent of Time	"Yes" Subtotal	
	Frequency	Percent
1 - 25	72	39.56
26 - 50	64	35.16
51 - 75	5	2.75
76 - 99	1	0.55
100 (all)	2	1.10
Varies with Individual	9	4.95
Not Ascertainable	29	15.93
Total	182	100.00

Do you feel that "after-school" programs for the **gifted** are useful ?

..... **Yes** ☐ ..... **No** ☐

Explain:

Responses	Frequency	Percent
Yes	142	69.60
No	43	21.10
Not Ascertainable	19	9.30
Total	204	100.00

Explanation	"Yes" Subtotal		"No" Subtotal	
	Frequency	Percent	Frequency	Percent
Need Free Time After School	2	0.98	19	9.31
Need Time to Socialize With Others	0	0	7	3.43
Needs Should be Met During Regular School Day	7	3.43	16	7.84
Varies With Individual	4	1.96	0	0
If Child is Interested Voluntary Participation	21	10.29	2	0.98
Opportunity to Explore Special Interests	51	25.00	1	0.49
As Extension of Regular Gifted Program	12	5.88	1	0.49
Better Than Nothing	34	16.67	2	0.98
Other	11	5.39	2	0.98
Not Ascertainable	20	9.80	6	2.94
Total	162	79.40[1]	50	27.45[2]

[1] 79.40 % exceeds 69.60 % because some respondents gave more than one answer.
[2] 27.45 % exceeds 21.10 % because some respondents gave more than one answer.

What conditions must exist to make summer programs valuable for the **gifted** ?

Value of Summer Programs	Frequency	Percent
Trained Teachers Available	65	31.86
Funds and Supplies	34	16.67
Well Designed Curriculum	96	47.06
Voluntary Student Participation	20	9.80
Must Supplement Regular Curriculum	14	6.86
Must Foster Special Interests	46	22.55
Curriculum Different From that for Regular Students	38	18.63
Regular Gifted Programs Must Exist in School First	3	1.47
Don't Know	3	1.47
Not Ascertainable	29	14.22
Total	348*	170.59

*Total exceeds 204 because three answers could be given by each respondent. Percent is based on 204.

Do you think that homogeneous grouping is more important for **gifted** children than average children ? .....**Yes** □ .....**No** □

Explain:

Homogeneous Grouping Importance	Frequency	Percent
Yes	112	54.90
No	75	36.76
Not Ascertainable	17	8.33
Total	204	100.00

Explanation of Value of Homogeneous Grouping (two answers permitted)	"Yes" Subtotal		"No" Subtotal	
	Freq	Percent	Freq	Percent
Gifted Need Stimulus of Like Minds	51	25.00	–	–
Gifted Need Fast Pace of Learning to Prevent Boredom	21	10.29	–	–
They Need Others Like Themselves to Prevent Isolation	23	11.27	1	0.49
Different Teaching Categories and Approaches are Required	19	9.31	1	0.49
Produce Desirable Effects	9	4.41	–	–
All Children Need Grouping	4	1.96	28	13.73
Homogeneous Grouping Unnecessary, Undesirable	1	0.49	23	11.27
Other	2	0.98	3	1.47
Not Ascertainable	14	6.86	23	11.27
Total	144	70.59	79	38.73

In your own terms, please define homogeneous grouping as it applies to **gifted** children.

Definition of **Homogeneous** Grouping	Frequency	Percent
Similar IQ	80	39.22
Similar Ability in Particular Skill – Reading, Math, Music	68	33.33
Ability to Learn at Faster Rate Than Chronological Peers	8	3.92
Special Grouping Within Larger Class	12	5.88
Similar Interests	51	25.00
Age is an Important Factor	8	3.92
Gifted Should not be Isolated From Average	4	1.96
Homogeneous Grouping not Necessary	12	5.88
Don't Know	8	3.92
Not Ascertainable	30	14.71
Total	281*	137.74

* Total exceeds 204 because 2 answers could be given by each respondent. Percent is based on 204.

OPERATIONS RESEARCH, Inc.

SILVER SPRING, MARYLAND

THE ADVOCATE SURVEY

A SURVEY OF EXPERTS IN THE EDUCATION OF GIFTED CHILDREN

1971

What 3 factors should be considered (in order of importance) when grouping **gifted** children ?

Factors in Grouping Gifted Children	First Factor		Second Factor		Third Factor	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Intellectual Ability, IQ	48	23.53	14	6.86	8	3.92
Age	12	5.88	15	7.35	7	3.43
Social Maturity	9	4.41	23	11.27	15	7.35
Achievement Level	13	6.37	19	9.31	13	6.37
Special Interests	23	11.27	30	14.71	20	9.80
Educational Needs of Child	22	10.78	10	4.90	11	5.39
Prevent Isolation From Average Students	8	3.92	7	3.43	1	0.49
Effect on Non-Gifted Students	1	0.49	3	1.47	4	1.96
Other	12	5.88	9	4.41	19	9.31
Different Grouping for Each Subject	6	2.94	4	1.96	2	0.98
Group by Potential Rather Than Past Achievement	7	3.43	7	3.43	2	0.98
Nature of Program	12	5.88	17	8.33	8	3.92
Social and Racial Characteristics of Population	–	–	2	0.98	4	1.96
Individual Instruction Only, No Grouping	5	2.45	–	–	1	0.49
High Creativity	1	0.49	3	1.47	3	1.47
Not Ascertainable	25	11.25	41	20.10	86	42.15
Total	204	100.00	204	100.00	204	100.00

Priority Ranking

To determine the relative priority of each factor to be considered in grouping Gifted children the following point system was used. First choice = 3 points, second choice = 2 points, and third choice = 1 point. The total points for each factor were then added together to give the average priority ranking. See listing below for actual priority rank.

Priority ranking of factors to be considered when grouping Gifted children.

PRIORITY RANKING

Rank	Factors	Tabulated Score
1	Intellectual Ability , IQ	180
2	Special Interests	149
3	Educational Needs of Child	97
4	Achievement Level	90
5	Social Maturity	88
6	Nature of Program	78
7	Age	73
8	Other	73
9	Prevent Isolation From Average Students	39
10	Group by Potential Rather Than Past Achievement	37
11	Different Grouping for Each Subject	28
12	Individualized Instruction; No Grouping	16
13	Effect on Non-Gifted Students	13
14	High Creativity	14
15	Social and Racial Characteristics of Population	8

Possible approaches to differentiated education for gifted and talented children.

Concept Under Evaluation	Not True or Not Important		Fairly Important		Essential		Not Ascertainable	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Conventional Curriculum Requirements Should be Covered at Each Grade Level in Differentiated Programs for the Gifted	125	61.27	58	28.43	13	6.37	8	3.92
A Curriculum Based on Identified Specialized Interests Should be Provided for the Gifted	17	8.33	89	43.63	96	47.06	2	0.98
Development of Aesthetic Sensitivity Should be Stressed in an Educational Program for the Gifted	21	10.29	96	47.06	84	41.18	3	1.47
Instruction for the Gifted Should be Ungraded	16	7.84	85	41.67	96	47.06	7	3.43
Social Interaction in the Classroom Should be Encouraged as Much as Possible Among Gifted Children	16	7.84	88	43.14	97	47.55	3	1.47
Emphasis Should be Placed on the Personal Adjustment of the Gifted Child	28	13.73	79	38.73	94	46.08	3	1.47

Rate the following concepts according to their potential utility in a differentiated program for **gifted** children. Circle the value that most nearly fits the accompanying concept.

Concept	Not True or Not Important		Fairly Important		Essential		Not Ascertainable	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Programs for Gifted Must Accommodate Different Learning Styles	4	1.96	15	7.35	182	89.22	3	1.47
Program Objectives Should Stress:								
The Stimulation of Individual Interests	1	1.49	22	10.78	178	87.25	3	1.47
Extension of Educational Planning to the Pre-school Level	18	8.82	70	34.31	109	53.43	7	3.43
Student Initiative	2	0.98	33	16.18	164	80.39	5	2.45
Involvement of Parents in Their Children's Education	4	1.96	76	37.25	121	59.31	3	1.47
Involvement of Community Resource Personnel in the Program	5	2.45	68	33.33	128	62.75	3	1.47
Development of Self-Acceptance	2	0.98	44	21.57	153	75.00	5	2.45
Development of Positive Attitudes Toward Others	4	1.96	53	25.98	142	69.61	5	2.45
Recognition of Early Readiness to Undertake Complex Learning Tasks	1	0.49	51	25.00	147	72.06	5	2.45
Concept Development	3	1.47	34	16.67	163	79.90	4	1.96
Creativity	2	0.98	39	19.12	159	77.94	4	1.96

Select the five most important items that you think program objectives should stress. (Circle the letters in front of the concept)

Priority Ranking

Rank	Most Important Program Objectives	Circled Frequency	Percent
1	Creativity	149	73.04
2	Stimulation of Individual Interests	123	60.29
3	Student Initiative	98	48.04
4	Development of Self-Acceptance	91	44.61
5	Concept Development	90	44.12
6	Recognition of Early Readiness to Undertake Complex Learning Tasks	86	42.16
7	Development of Positive Attitudes Towards Others	69	33.82
8	Involvement of Parents in Their Children's Education	63	30.88
9	Extension of Educational Planning to the Preschool Level	58	28.43
10	Involvement of Community Resource Personnel	49	24.02
	Total	876*	429.41

* Total exceeds 204 because of the possibility of circling five of the items. Percent is based on 204.

Do you feel that **gifted** students can make better use of the community as a learning resource than average students?.....**Yes**☐.....**No**☐

Explain

Respondents	Frequency	Percent
Yes	168	82.35
No	22	10.78
Not Ascertainable	14	6.86
Total	204	100.00

Explanation (2 answers permitted)	Yes		No	
	Frequency	Percent	Frequency	Percent
Gifted Have a Higher Potential for Understanding, Insight	67	32.84	–	–
Gifted Have a Wider Range of Interests and Curiosity, Stronger Motivation, Awareness	44	21.57	–	–
Gifted are Able to Use Sources More Effectively, Communicate with Adults	44	21.57	–	–
Gifted are Independent - Self-reliant	31	15.20	–	–
Depends upon Circumstances and Individuals Involved	4	1.96	7	3.43
No Difference Between Average and Gifted	–	–	6	2.94
Other	5	2.45	1	0.49
Not Ascertainable	31	15.20	9	4.41
Total Explanations	226	110.78[1]	23	11.27[2]

[1] 110.78% exceeds 82.35 because some respondents gave more than one answer.

[2] 11.27% exceeds 10.78 because some respondents gave more than one answer.

Administrative Requirements

3.26 The primary administrative requirement, recognized by over 96% of the respondents, is for a person at the state level who would be delegated responsibility for the education of G&TC&Y throughout the state. This person would serve to develop awareness of the need for differentiated programs and to explain and coordinate state-wide programs. He would also administer state and Federal funding, develop programs to identify G&TC&Y, and develop training activities for teachers and administrators.

3.27 The respondents also agreed that there should be a local level coordinator. This person should have a master's degree in education for G&TC&Y, or at least some experience working with them, hopefully to ensure his understanding of their special needs. Respondents most often designated this local coordinator as the person who should be responsible for making basic decisions on programs at the school level; almost all agreed, however, that he should be aided in making these decisions by the school district administrators, the principals, teachers, and the state coordinator for G&TC&Y.

3.28 Over 90% of the respondents agreed that a teacher who must provide special instruction to G&TC&Y should be aided by a consultant and, if possible, should have participated in a master's level program for the gifted and talented. They also said that participation in such a master's program would be useful to state or local administrators involved in education for the gifted and talented. They agreed that, at the very least, administrators in a school system that provides differentiated programs should have some in-service training related to the education of G&TC&Y.

TABULATED RESPONSES CONCERNING ADMINISTRATIVE REQUIREMENTS

Should there be a person at the state level who is delegated the responsibility for education of **gifted** children throughout the state ? .....**Yes** ☐.....**No** ☐

State Person Needed	Frequency	Percent
Yes	197	96.57
No	4	1.96
Not Ascertainable	3	1.47
Total	204	100.00

If yes, what should his function be ? *(circle the number beside all that apply)*

Function of State Level Person	Number Circled		Number Not Circled		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Develop Awareness of Need for Differentiated Programs for Gifted	192	94.12	12	5.88	204	100.00
Develop Programs for Identification of Gifted	157	76.96	47	23.04	204	100.00
Develop Certification Standard for Teachers of the Gifted	108	52.94	96	47.06	204	100.00
Develop Differentiated Curricula for the Gifted	134	65.69	70	34.31	204	100.00
Explain and Coordinate Statewide Educational Programs for the Gifted	169	82.84	35	17.16	204	100.00
Develop and Coordinate Training Activities for Teachers and Administrators	148	72.55	56	27.45	204	100.00
Evaluate Instructional Materials and Programs for the Gifted	128	62.75	76	37.25	204	100.00
Administer State Funding for Programs for the Gifted	160	78.43	44	22.57	204	100.00
Coordinate Materials Center and Demonstration Projects	152	74.51	52	25.49	204	100.00
Administer or Coordinate Federal Funding for the Gifted	151	74.02	53	25.98	204	100.00
Other	9	4.41	195	95.59	204	100.00
Coordinate Consultants' Help	2	0.98	202	99.02	204	100.00

Is there a need for a full-time coordinator (or consultant) for **gifted** programs at the local level ? .....**Yes** ☐ .....**No** ☐

If yes, what minimum qualifications should he have ?

Need for a Local Coordinator	Frequency	Percent
Yes	163	79.90
No	29	14.22
Not Ascertainable	12	5.88
Total	204	100.00

"Yes" – What are the Minimum Qualifications for Local Coordinator (3 answers permitted)	Frequency	Percent
MA in Gifted or Other Relevant Disciplines	73	35.78
Research Experience	5	2.45
Teaching Experience with Gifted	87	42.65
Administrative Experience	37	18.14
Understanding of Needs of Gifted/ Some Courses	56	27.45
6 Year Certification in Administration	2	0.98
Ph.D.	4	1.96
Other	12	5.88
Not Ascertainable	13	6.37
Total	289*	141.67

* Total exceeds 163 because three answers could be given by each respondent. Percent is based on 204.

Who should be primarily responsible for making basic decisions affecting programs for the **gifted** at the school level ? *(check one)*

Primary Decision Maker	Frequency	Percent
School District Administrator	32	15.69
Consultant or Coordinator at State Level	12	5.88
Consultant or Coordinator at Local Level	102	50.00
Principal	17	8.33
Classroom Teacher	16	7.84
Other	2	0.98
Team Effort	16	7.84
Psychologist	1	0.49
Not Ascertainable	6	2.94
Total	204	100.00

These decisions affecting programs for the gifted at the school level should be made in consultation with:

Primary Decision Maker	Frequency	Percent
School District Administrators	127	62.25
Consultant or Coordinator at State Level	129	63.24
Consultant or Coordinator at Local Level	108	52.94
Principal	151	74.02
Classroom Teacher	156	76.47
Parents	35	17.16
Gifted Students	11	5.39
Psychologists	13	6.37
Other	6	2.94
Not Ascertainable	4	1.96
Total	740*	362.74

***Total exceeds 204** because each respondent was able to circle seven possible items. Percent based on 204.

Concept Under Evaluation	Not True or Not Important		Fairly Important		Essential		Not Ascertainable	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
When Teachers Must Provide Special Programs for the Gifted, They Should be Aided by a Consultant	13	6.37	77	37.75	108	52.94	6	2.94
All Instructional and Administrative Staff at the School Should Have a Basic Understanding of the Theory and Operation of a Differentiated Program for the Gifted	2	0.98	61	29.90	139	68.14	2	0.98
Teaching Gifted Should be Rotated Among All Teaching Staff Members	193	94.61	8	3.92	2	0.98	1	0.49

Rate the usefulness of participating in such a master's program to each of the following:

Not Needed Useful Essential

Usefullness of M.A. in Education of Gifted	A. State Administrators		B. Local Administrators		C. Teachers of Gifted	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Not Needed	30	14.71	30	14.71	12	5.88
Useful	119	58.33	128	62.75	85	41.67
Essential	44	21.57	37	18.14	98	48.04
Not Ascertainable	11	5.39	9	4.41	9	4.41
Total	204	100.00	204	100.00	204	100.00

In a district that provides differentiated programs for the **gifted**, what is the extent of need for in-service training of school administrators ? **No Need** ☐ **Important**☐ **Essential**☐

Need for **In-service Training**	Frequency	Percent
No Need	4	1.96
Important	80	39.22
Essential	116	56.86
Not Ascertainable	4	1.96
Total	204	100.00

Teachers

3.29 Selection Criteria. The respondents were asked in an open-ended question to list in order the five criteria most important for selecting teachers of the gifted. There was a surprising amount of similarity in the responses. The most frequently mentioned criterion, proven teaching ability, was noted by about 140 of the 204 respondents. Over half listed flexibility or open-mindedness as one of the five criteria. Approximately the same number listed "understanding of the special problems of gifted and talented." Various education requirements (e.g., "M.A. degree in gifted education" or "three courses in gifted education") were listed by some respondents, but these were so few in number that they could not be included as a separate category. The fourth criterion was ability to relate to children as indicated by such qualities as patience, sense of humor, understanding, etc. The fifth factor, classified by ORI as ego strength, was variously termed self-confidence, maturity, and ability to cope with criticism. The general opinion of the respondents was that ability and personality are much more important than formal training. Backing up this finding, a majority of the respondents said, in answer to another question, that an M.A. degree is not important for a teacher of gifted children.

3.30 The respondents also were asked to list the qualities they believed to be required for teaching talented children, if the qualities differed from those they believed to be required for teaching the gifted. About half felt that such a distinction should be made. Competence in the specified talent area was noted as the most important special criterion for teaching the talented. The remaining criteria were almost identical to those for gifted.

3.31 Recruitment and Training. When asked for their suggestions of ways to attract people with the necessary qualifications to the field of education for G&TC&Y, the respondents most frequently recommended training subsidies. They also felt that more college courses in education of G&TC&Y should be made available and that those pursuing such a program should be assured that there would be a demand for their specialty in the job market.

3.32 Intensive summer institute programs or in-service training were the preferred methods of increasing the number of trained teachers in places where there is an insufficient supply.[1/] Putting students through M.A. or B.A. programs was a much less popular choice. Only about 15% of the respondents knew of any master's level program for teachers of the gifted and talented in their states. The overwhelming majority of these (87%) said that such programs are not needed in their states. About one-third of the respondents felt

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1/ This opinion runs counter to the official USOE stand at present.

that a teacher in a separate class for the gifted and/or talented should have a special teaching degree, but the majority felt that less formal training is required. When asked what should be done to train teachers if there is no university nearby, two-thirds preferred in-service, workshop type sessions for experienced teachers.

3.33 Teaching Methods. The vast majority of the respondents agreed that teaching the gifted and talented requires a different approach than teaching average children. The teaching role is seen to be one of facilitating the child's learning rather than conveying knowledge to him. There was also general agreement that the teacher should not be an authoritarian figure in the classroom, but should allow the students to play an increasing role in the determination of their own behavior limits. Along the same lines, respondents believed that standard school regulations do not have to be strictly enforced in the classroom, and that, rather than restrict the child to a single approach to an assignment, teachers should minimize the structure of tasks.

SELECTED REMARKS FROM RESPONDENTS CONCERNING TEACHERS OF GIFTED AND TALENTED CHILDREN

"Give them (teachers) more information as to the worth and characteristics and needs of these children. Unless the teacher understands these children, she is intimidated and threatened by all but the conforming achieving gifted. Creativity presents a hardship for both teacher and student."

"Make possibilities of teaching the gifted known to gifted high school seniors and college freshmen. Develop a true profession of teachers of the gifted. Adopt this questionnaire as part of a college admission requirement for future teachers. Those who are open to a challenge will be challenged by this."

"The right ideas; the hell with his academic qualifications." (Qualifications of local coordinators.)

TABULATED RESPONSES CONCERNING
TEACHERS OF G&TC&Y

· Check all boxes that describe a teacher who in your judgment could be identified as "a teacher of the gifted."

Description of Teacher	Box Checked		Box Not Checked		Not Ascertainable		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
A Teacher of Gifted Children in the Regular Classroom with no Special Provisions	30	14.71	170	83.33	4	1.96	204	100.00
A Teacher who Provides Individualized Instruction to the Gifted Within a Regular Class	128	62.75	72	35.29	4	1.96	204	100.00
A Teacher who Teaches Primarily Gifted Children in a Special Program of Individualized Instruction Outside the Regular Classroom	186	91.18	14	6.86	4	1.96	204	100.00
A Teacher of Gifted Children in Academic Setting Restricted to Gifted Children	186	91.18	14	6.86	4	1.96	204	100.00

Please list by rank, five criteria that you feel are most important for selecting teachers for the gifted. Rank No. 1 for highest priority.

Teacher Selection Criteria	First Choice		Second Choice		Third Choice		Fourth Choice		Fifth Choice	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
High Intelligence	24	11.76	10	4.90	6	2.94	4	1.96	6	2.94
Flexibility-Open Mind	23	11.27	27	13.24	23	11.27	14	6.86	16	7.84
Enthusiasm Toward Teaching and Childred (High Motivation, Dedication)	19	9.31	20	9.80	12	5.88	12	5.88	10	4.90
Wide Interests	2	0.98	3	1.47	11	5.39	11	5.39	7	3.43
Ego Strength, Self-Confidence, Maturity	19	9.31	19	9.31	20	9.80	14	6.86	15	7.35
Love of Learning, Intellectual Curiosity	10	4.90	16	7.84	11	5.39	8	3.92	11	5.39
Understanding of Special Problems of Gifted	30	14.71	16	7.84	19	9.31	21	10.29	14	6.86
Proven Teaching Ability	14	6.86	25	12.25	37	18.14	35	17.16	28	13.73
Competence in Specified Skill	4	1.96	5	2.45	5	2.45	7	3.43	8	3.92
Strong Academic Background	8	3.92	17	8.33	9	4.41	10	4.90	10	4.90
Creativity	2	0.98	8	3.92	8	3.92	15	7.35	8	3.92
Other	6	2.94	–	–	4	1.96	7	3.43	14	6.86
Able to Relate to Children (Sensitive, Patient, Sense of Humor, Communication)	26	12.75	19	9.31	17	8.33	14	6.86	20	9.80
Not Ascertainable	17	8.33	19	9.31	22	10.78	32	15.69	37	18.14
Total	204	100.00	204	100.00	204	100.00	204	100.00	204	100.00

To determine the relative priority of each selection criterion for teachers of the gifted, the following point system was used. First choice - five points, second choice - four points, etc., down to the fifth choice which was one point. The total points for each teacher selection criterion were then added together to give the overall priority ranking. See listing below for actual priority rank.

Priority ranking of criteria for selecting teachers for the gifted.

PRIORITY RANKING

Rank	Teacher Selection Criteria	Tabulated Score
1	Proven Teaching Ability	379
2	Flexibility - Open Mind	336
3	Understanding of Special Problems of Gifted/ Talented	327
4	Able to Relate to Children (Sensitive, Patient, Sense of Humor, Communication)	305
5	Ego Strength, Self-Confidence, Maturity	274
6	Enthusiasm Toward Teaching and Children (High Motivation, Dedicated)	245
7	High Intelligence	192
8	Love of Learning, Intellectual Curiosity	174
9	Strong Academic Background	165
10	Creativity	104
11	Wide Interests	84
12	Competence in Specified Skill (Art, Music)	77
13	Other	70

Please list by rank if different from gifted, five criteria that you feel are most important for selecting teachers for the talented. Rank No. 1 for highest priority.

Teacher Selection Criteria	First Choice		Second Choice		Third Choice		Fourth Choice		Fifth Choice	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
High Intelligence	1	0.49	–	–	2	0.98	2	0.98	2	0.98
Flexibility–Open Mind	–	–	9	4.41	9	4.41	8	3.92	5	2.45
Enthusiasm Toward Teaching and Children (High Motoviation, Dedicated)	6	2.94	6	2.94	7	3.43	3	1.47	6	2.94
Wide Interests	–	–	–	–	1	0.49	1	0.49	2	0.98
Ego Strength, Self-Confidence, Maturity	6	2.94	4	1.96	7	3.43	4	1.96	1	0.49
Love of Learning, Intellectual Curiosity	1	0.49	4	1.96	4	1.96	6	2.94	1	0.49
Understanding of Special Problems of Talented	5	2.45	7	3.43	6	2.94	10	4.90	5	2.45
Proven Teaching Ability	4	1.96	17	8.33	17	8.33	10	4.90	14	6.86
Competence in Specified Skill	44	21.57	15	7.35	11	5.39	4	1.96	2	0.98
Strong Academic Background	–	–	3	1.47	1	0.49	1	0.49	2	0.98
Creativity	3	1.47	4	1.96	2	0.98	3	1.47	4	1.96
Other	–	–	1	0.49	3	1.47	5	2.45	5	2.45
Able to Relate to Children (Sensitive, Patient, Sense of Humor, Communication)	8	3.92	6	2.94	4	1.96	8	3.92	8	3.92
Not Ascertainable	126	61.76	128	62.74	130	63.73	139	68.14	147	72.06
Total	204	100.00	204	100.00	204	100.00	204	100.00	204	100.00

To determine the relative priority of each selection criterion for teachers of the talented, the following point system was used. First choice - five points, second choice - four points, etc., down to the fifth choice which was one point. The total points for each teacher selection criterion were then added together to give the overall priority ranking. See listing below for actual priority rank.

Priority ranking of criteria for selecting teachers of the talented (only if different from criteria for gifted).

PRIORITY RANKING

Rank	Teacher Selection Criteria	Tabulated Score
1	Competence in Specified Skill (Art, Music)	323
2	Proven Teaching Ability	203
3	Able to Relate to Children (Sensitive, Patient, Sense of Humor, Communication)	100
4	Understanding of Special Problem of Gifted/ Talented	96
5	Enthusiasm Toward Teaching and Children (High Motiviation, Dedicated)	87
6	Flexibility - Open Mind	84
7	Ego Strength, Self-Confidence, Maturity	76
8	Creativity	47
9	Love of Learning, Intellectual Curiosity	46
10	Other	28
11	Strong Academic Background	19
12	High Intelligence	17
13	Wide Interests	7

What can be done to encourage teachers to specialize in education for the **gifted** ?

Suggestions to Encourage Specialization	Frequency	Percent
Assure Positions in Job Market for Teaching Gifted	40	19.61
Organize Demonstration and Training Centers	21	10.29
Make College Courses in Education for Gifted Available (Including Offering B.A. in Gifted Education)	43	21.08
Subsidize Training for Teachers of Gifted	50	24.51
Pay Differential	25	12.25
Recognition, Prestige, Status	35	17.16
Establish State Certification for Teaching Gifted	4	1.96
Publicize Needs and Programs Among Teachers	43	21.08
Subsidize New Programs	17	8.33
Make In-Service Training Available	22	10.78
Other	9	4.41
Not Ascertainable	15	7.35
Total	324*	158.81

* Total exceeds 204 because respondents were allowed up to four answers.

Please assume inadequate supply of teachers of the gifted: what are the most useful methods of developing a sufficient number of teachers of the **gifted?** *(rank in order, 1 = highest)*

Training Methods	First Choice		Second Choice		Third Choice		Fourth Choice		Fifth Choice		Sixth Choice		Not Ascertainable		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Special Classes in Teaching the Gifted at the Undergraduate Levels for Future Teachers	29	14.22	26	12.75	41	20.10	31	15.20	60	29.41	4	1.96	13	6.37	204	100.00
A Master's Degree Program in Gifted Education for Teachers with Previous Teaching Experience	50	24.51	28	13.73	45	22.06	54	26.47	15	7.35	–	–	12	5.88	204	100.00
A Master's Degree Program in Gifted Education for Students with No Teaching Experience	11	5.39	19	9.31	20	9.80	63	30.88	73	35.78	6	2.94	12	5.88	204	100.00
An In-Service Training Program for Teachers Conducted in Workshop Sessions During the School Year	50	24.51	59	28.92	36	17.65	29	14.22	22	10.78	1	0.49	7	3.43	204	100.00
An Intensive Summer Institute Program for Certified Teachers with One or More Years of Experience	56	27.45	64	31.37	50	24.51	12	5.88	13	6.37	3	1.47	6	2.94	204	100.00
B.A. Degree in Gifted	4	1.96	2	0.98	2	0.98	1	0.49	–	–	1	0.49	194	95.10	204	100.00

Please assume inadequate supply of teachers of the gifted: what are the most useful methods of developing a sufficient number of teachers of the **gifted?** *(rank in order, 1 = highest)*

To determine the relative priority of each method of developing a sufficient number of teachers, the following point system was used. First choice - six points, second choice - five points, etc., down to the sixth choice which was one point. The total points for each useful method were then added to give the overall priority ranking. See listing below for actual priority rank.

PRIORITY RANKING

Rank	Useful Methods	Tabulated Score
1	An Intensive Summer Institute Program for Certified Teachers With One or More Years of Experience	921
2	An In-Service Training Program for Teachers Conducted in Workshop Session During the School Year	871
3	A Master's Degree Program in Gifted Education for Teachers With Previous Teaching Experience	812
4	Special Classes in Teaching the Gifted at the Undergraduate Level for Future Teachers	685
5	A Master's Degree Program in Gifted Education for Students With No Prior Teaching Experience	582
6	BA Degree in Gifted Education	46

Assuming non-availability of local university resources for training teachers in **gifted** education (university more than 50 miles away), what is the most useful method of developing an adequate supply of teaching manpower ?

Method of Developing Adequate Manpower	Frequency	Percent
In-Service Teacher Training Programs	139	68.14
Intensive Summer Institute	58	28.43
Practice Teaching in a Gifted Program	7	3.43
University Extension Classes	27	13.24
Train Small Group of Teachers or Administrators for Training-Supervisory Roles Throughout State	20	9.80
Scholarship to University	12	5.88
Other	10	4.90
Don't Know	0	0.00
Not Ascertainable	135	66.18
Total	408*	608.00

* Total exceeds 204 because two answers could be given by each respondent; percent based on 204.

STAFF ORIENTATION AND SELECTION CRITERIA

Concept Under Evaluation	Not True or Not Important		Fairly Important		Essential		Not Ascertainable	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Teachers of the Gifted Should Have a Sympathetic Attitude Toward Differentiated Education Programs for the Gifted	2	0.98	27	13.24	173	84.80	2	0.98
Teachers of the Gifted Should Demonstrate a Specialize Knowledge of at Least One Subject Area	36	17.65	79	38.73	86	42.16	3	1.47
Teaching the Gifted Ideally Requires at Least a Master's Degree	111	54.41	70	34.31	20	9.80	3	1.47
Ability to Teach the Gifted Should be Considered More a Function of Experience Than of Special Training	127	62.25	55	26.96	17	8.33	5	2.45
Ability to Teach the Gifted Should be Considered More a Function of Training Than of Experience	122	59.80	64	31.37	14	6.86	4	1.96
Training and Experience should be Considered Equally Important Factors in Selecting Teachers for the Gifted	36	17.65	72	35.29	91	44.61	5	2.45
Teachers of the Gifted Should Receive Continuous Up-date Training to Remain Effective	4	1.96	72	35.29	127	62.25	1	0.49
Teachers of the Gifted Should Be Selected on the Basis of a Rich Academic Background	38	18.63	110	53.92	48	23.53	8	3.92

STAFF ORIENTATION AND SELECTION CRITERIA

Concept Under Evaluation	Not True or Not Important		Fairly Important		Essential		Not Ascertainable	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Prior Performance With Average Children Should be Considered a Good Indication of a Teacher's Probable Performance With Gifted Children	98	48.04	83	40.69	19	9.31	4	1.96
Experienced Teachers Tend to be More Successful With the Gifted Than New Teachers	119	58.33	66	32.35	13	6.37	6	2.94
Teachers of the Gifted Should be Oriented Toward Close Communications With Other Professionals Dealing With the Gifted	2	0.98	79	38.73	120	58.82	3	1.47
Assignments for Teaching the Gifted Should go to Those With at Least 3 Years of Teaching Experience	127	62.25	60	29.41	11	5.39	6	2.94
Only the Brightest Teachers Should Work With Gifted Children	86	42.16	85	41.67	29	14.22	4	1.96
Teachers of the Gifted Need More Self-confidence Than Teachers of Average Children	30	14.71	78	38.24	93	45.59	3	1.47
Laymen Cannot Teach Gifted Children Effectively Without Special Preparation	139	68.14	45	22.06	14	6.86	6	2.94
Teachers of the Gifted Should be Required to Meet Specific Certification Requirements Concerning Their Specialty	71	34.80	95	46.57	33	16.18	5	2.45
Some Differentiated Programs for the Gifted Should be Carried out in a Regular Classroom by a Teacher who is not a Specialist in Education for the Gifted	51	25.00	103	50.49	43	21.08	7	3.43

Please indicate the minimum special training needed by a classroom teacher to work effectively with gifted children in each situation below.

Class Situations	None		A Few Workshop Type Classes		Several Weeks on the job Training		One Semester of a Formal Course in Teaching the Gifted		Several Courses in Teaching the Gifted		A Teaching Degree With Emphasis on Education for the Gifted		Other		Not Ascertainable		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Regular Class, No Specialized Program	10	4.90	56	27.45	30	14.71	58	28.43	26	12.75	6	2.94	8	3.92	10	4.90	204	100.00
Regular Class With Specialized Program for Gifted	3	1.47	18	8.82	30	14.71	50	24.51	74	36.27	14	6.86	5	2.45	10	4.90	204	100.00
Separate Class Designed for Gifted	4	1.96	4	1.96	12	5.88	14	6.86	74	36.27	72	35.29	14	6.86	10	4.90	204	100.00
Separate School for the Gifted	3	1.47	2	0.98	9	4.90	10	4.90	41	20.10	103	50.49	24	11.76	12	5.88	204	100.00

Rate the following concepts according to their potential utility in a differentiated program for **gifted** children. Circle the value that most nearly fits the accompanying concept.

Concept Under Evaluation	Not True or Not Important		Fairly Important		Essential		Not Ascertainable	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Teaching the Gifted Requires a Different Approach than Teaching Average Children	18	8.82	61	29.90	123	60.29	2	0.98
Teachers of the Gifted Should be Able to Perform as **Facilitators of Learning** Rather than as Dissem-inators of Knowledge	3	1.47	23	11.27	174	85.29	4	1.96
Teachers of Gifted Should Minimize Structure of Tasks	46	22.55	92	45.10	59	28.92	7	3.43
Teachers of the Gifted Need More Knowledge of Behavior Reinforcing Techniques than Teachers of Average Students	125	61.27	47	23.04	29	14.22	3	1.47
Desired Intellectual and Social Behavior Should be Systematically Reinforced When Teaching Gifted	53	25.98	91	44.61	52	25.49	8	3.92
Standard School Regu-lations Should be Strictly Enforced by the Teacher	125	61.27	61	29.90	11	5.39	7	3.43
Gifted Children Should Play an Increasing Role in the Determination and Enforcement of Classroom Rules	35	17.16	89	43.63	76	37.25	4	1.96
Instructional Technology Should be Employed to Individualize Instruction of the Gifted	20	9.80	102	50.00	76	37.25	6	2.94

Does your state have any certification requirements for teaching the **gifted** ?

Requirements	Total	
	Freq	Percent
Yes	9	4.41
No	177	86.77
Don't Know (expressed)	13	6.37
Not Ascertainable	5	2.45
Total	204	100.00

Is there a master's degree program specializing in teaching of the **gifted** at any institution of higher learning in your state ? .....**Yes** ☐.....**No** ☐.....**Don't know** ☐

Is one needed ? ☐ **Yes** ☐ **No**

Availability of Master's Degree	Total		"No" Subtotals	
	Freq	Percent	Freq	Percent
Yes	30	14.71	–	–
No	119	58.33	–	–
Don't Know	44	21.57	–	–
Not Ascertainable	11	5.39	–	–
Is There a Need for Such a Program?				
Yes	–	–	7	5.88
No	–	–	103	86.55
Don't Know	–	–	9	7.57
Not Ascertainable	–	–	0	–
Total	204	100.00	119	100.00

Support Staff

3.34 Most of the pupil personnel service workers, such as psychologists and guidance counselors, were seen as rather favorably disposed toward the gifted and talented. Nevertheless, the respondents judged that most of the pupil personnel staff is inadequately prepared to provide effective service for G&TC&Y. Only about 12% of the respondents felt that the preparation of most pupil personnel service works is adequate. To remedy this problem, they suggested in-service workshops, or any other way in which the pupil personnel services staff could develop an understanding of the special needs of the gifted and talented.

3.35 Over 75% of the respondents felt that paraprofessionals can play useful roles in education of G&TC&Y, but only 20% felt that there is an adequate supply of such workers in their states. The duties suggested for the paraprofessionals included providing general support for the teacher, performing clerical functions, assisting in individualizing instruction, and helping with resource and reference materials.

TABULATED RESPONSES CONCERNING SUPPORT STAFF

In your experience what is the general attitude of pupil personnel service workers toward the **gifted ?** *(check one for each)*

General Attitude	A. School Psychologist		B. Guidance Counselor		C. Social Workers		D. Tutorial Staff		E. Other	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Highly Positive	81	39.71	48	23.53	21	10.29	32	15.69	5	2.45
Slightly Positive	69	33.82	82	40.20	46	22.55	52	25.49	6	2.94
Neutral	23	11.27	34	16.67	65	31.86	55	26.96	1	0.49
Slightly Negative	15	7.35	26	12.75	36	17.65	26	12.75	14	6.86
Strongly Negative	6	2.94	6	2.94	13	6.37	5	2.45	3	1.47
Don't Know	2	0.98	3	1.47	9	4.41	12	5.88	1	0.49
Not Ascertainable	8	3.92	5	2.45	14	6.86	22	10.78	174	85.29
Total	204	100.00	204	100.00	204	100.00	204	100.00	204	100.00

Explain general attitude of pupil personnel service workers toward the **gifted ?**

Explanations	Frequency	Percent
Naive Attitude About Gifted	13	6.37
Teachers Have Negative Attitude Toward Gifted	10	4.90
Too Much Emphasis on Discipline Problems	5	2.45
Gifted are Ignored	18	8.82
Usually Show Positive Attitude	7	3.43
Need Special Training	2	0.98
Other	11	5.39
Not Ascertainable *	138	67.64
Total	204	100.00

* No explanation given.

What pupil personnel services are most needed by **gifted** children ?

Pupil Personnel Services	Frequency	Percent
Psychological Services	73	35.78
Guidance Counseling	137	67.16
Specialists in Speech, Hearing, Learning Problems	8	3.92
Transportation/Monetary Assistance	1	0.49
Identification Specialist	28	13.72
Vocational Guidance (College Counseling)	17	8.33
All Services	11	5.39
No Services	5	2.45
Other	24	11.76
Not Ascertainable	24	11.76
Total	328*	160.76

* Total exceeds 204 because three answers could be given by each respondent. Percent is based on 204.

In your judgment are most pupil personnel service workers adequately prepared to provide effective services for **gifted** children ? .....**Yes** ☐ .....**No** ☐

If no, what preparation is needed ?

Adequacy of Preparation	Total		"No" Subtotals	
	Frequency	Percent	Frequency	Percent
Not Ascertainable	5	2.45		
Yes	24	11.76		
No	175	85.79		
Preparation Suggested by Those who Termed Current Preparation Inadequate:				
Workshops, In-service Training, or Other Special Instruction for Gifted			42	24.00
Experience Working With Gifted Only			8	4.57
Both of the Above Only			7	4.00
Formal Course Work in a University			34	19.43
Suggestions Two and Four Only			3	1.71
Knowledge of Needs of Gifted			46	26.29
Suggestions One and Four Only			18	10.29
Other			4	2.29
Don't Know			1	0.57
Not Ascertainable			12	6.86
Total	204	100.00	175	100.00

Is there an adequate supply of paraprofessionals available to assist in the education of the gifted in your state ? ..... Yes☐.....No ☐ .....Don't know☐

Adequate Supply of Professionals	Frequency	Percent
Yes	41	20.10
No	92	45.10
Don't Know (expressed)	39	19.12
Not Ascertainable	32	15.69
Total	204	100.00

Is there a specific useful role for paraprofessionals (teachers' aides) in education of **gifted** ?

.....Yes☐.....No ☐

What role should paraprofessionals play in education of the gifted? ***(specify tasks)***

Role Exists for Paraprofessionals	Total		"Yes" Subtotal	
	Freq	Percent	Freq	Percent
No	38	18.63		
Not Ascertainable	9	4.41		
Yes	157	76.96		
Roles Suggested for Paraprofessionals: (Two answers permitted)				
Assist in Individualizing Instruction			55	35.03
Teach in Own Special Area			28	17.84
Supportive Role to Teacher, Clerical Functions, etc.			62	39.49
Help with Resource, Reference Materials			54	34.40
Varies with Conditions			2	1.27
Other			7	4.46
Don't Know			1	0.64
Not Ascertainable			15	6.70
Total	204	100.00	224*	139.83

*** Total exceeds 157 because two answers could be given by each respondent. Percent is based on 204.**

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IMPLEMENTATION PLANS

Attitudes Toward Differentiated Programs for the Gifted and Public Relations

3.36 Only one-fourth of the respondents felt that education for G&TC&Y is a continuing priority in their communities. The most common reasons given for the lack of concern were the dearth of public information about the needs of the gifted and talented, and insufficient funds earmarked for the gifted and talented.

3.37 The respondents were almost unanimous in stressing the need for public relations work. Various forms of misleading information, including the belief that G&TC&Y are "so smart they can manage for themselves," would be the targets of such public relations efforts. A number of respondents consider increasing the awareness of teachers and school administrators to be of equal importance with education of the lay public. Generally, they assessed the attitude of personnel in the local, state, and Federal level education agencies as slightly more positive than the attitude of the lay public, but they indicated that despite this, they would term the amount of effort and financial support being invested in education programs for the gifted and talented as inadequate. A lack of funds and the fact that the gifted and talented usually are not high on the list of candidates for special education programs are two possible explanations for this.

3.38 A variety of methods for increasing concern about G&TC&Y were suggested. These centered on upgrading public information through the use of communication media, such as television and newspapers, to publicize both the needs of G&TC&Y and well-run programs that address those needs. Parents were suggested as a valuable source of enthusiastic support in the work of stimulating awareness and concern. When asked to describe the extent of involvement in program decisions appropriate for parents and for the students themselves, most respondents replied that there should be extensive or total involvement on the part of these groups. The parents were usually described as able and willing to make useful contributions to every aspect of the program, from planning, to informing the public and assisting teachers in the classroom.

SELECTED REMARKS FROM RESPONDENTS CONCERNING ATTITUDES TOWARD DIFFERENTIATED PROGRAMS

". . . (There is) no real opposition to special education programs as such—rather we have a negative reaction toward education in general. I believe that the average lay citizen believes that if he is opposed to education he is in some way expressing his opposition to forced integration."

"Educate teachers, administrators, legislators and public to the reality that present gifted students are the future scientists, lawyers, statesmen, educators: our greatest national resource."

"(The main sources of opposition are) traditional conservative attitudes of parents, teachers, administrators, boards of education, and university faculties. They want all students in a class to be given the same assignments and everyone is happy (except the learners) if the class is quiet, in nice straight rows, and doesn't cause any trouble (like thinking or challenging the teacher)."

"The degree of anti-intellectualism has increased in this country in the past few years. Gifted programs are out of favor and the intellectual carries a greater stigma."

"First, convince the leading citizens that they were gifted children. The socio-economic, cultural, and philosophical orientation of the local community will determine the starting points and the direction. Possibly the first step is to orient the school board to the total concept of exceptionality."

"I find that voters are less resistant to special programs for gifted than it appears at first. They respond favorably when properly informed and are more sympathetic afterwards. There is a good deal of ignorance and misinformation about the needs of gifted children. Local voters were shocked to hear about the high failure and dropout rates among highly gifted students in San Diego before our program began—those who know the fine results of the program usually support it."

"Unfavorable attitudes include those of parents who wear their gifted child as a merit badge, and those of politicians who view the gifted as a national resource—and of teachers who "achieve" through them, besides all those who resent their undemocratic smartness. The question reduces to 'how do we get everyone to be humane?'— and I don't have an answer. The most I hope for is that kids will have some protected time and space in which to grow. I think we can provide protection."

"Current socio-political 'climate' is anti-intellectual. People are relying on police and governors to control non-conforming students, their intellectual leaders, and 'permissive' faculty and administrators.

Americans traditionally have been distrustful and uncomfortable with the brilliant and the artistic. The ethic of regular, dependable, plodding hard work conflicts with the image or stereotype of the "gifted" who is suddenly inspired or discovers. We haven't outgrown this yet."

"Some teachers are afraid they will lose their bright students, and like the public, say that they need their bright students to inspire the others. That makes the brightest students second class citizens, kept around, bored and unfulfilled, to serve the average students (who usually do not appreciate the comparison).

An effective method (if somewhat banal) is to describe individual tragedies when no programs are available, and outstanding successes when they are. Primarily, the public must be educated to understand the needs of gifted children and to change the many misconceptions. Most people think gifted children are over-privileged or freaks and they think both things at the same time!"

"The lay public especially needs to know that many of these children are not being educated at all in a regular program and that many are drop-outs from school."

"Education of the lay public is vital. Most people think gifted children have everything going for them and have no idea of the tragedies, failures, and loss of potential that occur when gifted children receive no help. Stress should be put on waste of economic, social, and personal resources when gifted children are ignored. Industry is often the first to respond to the need."

"Parents are the most knowledgeable about the problems and (are) enthusiastic supporters of good programs for the gifted. They are a major community resource to help develop good programs . . . . Students are excellent critics of available programs and often have the best suggestions for improvements."

"Quite simply, a comprehensive study should be conducted to demonstrate the loss of superior talent in our country."

TABULATED RESPONSES CONCERNING ATTITUDES TOWARD DIFFERENTIATED PROGRAMS

Is education for the **gifted** a continuing priority at the local level in your community ?

..... **Yes** ☐ ..... **No** ☐

If no, what can be done to make it one if you believe there is a need to do so ?

Need for Continuing Priority of Education	Total		"No" Subtotal	
	Frequency	Percent	Frequency	Percent
Yes	50	24.51		
Not Ascertainable	13	6.37		
No:	141	69.12		
Establish Position of Coordinator For Gifted			12	5.88
Encourage Research			5	2.45
Educate Administrators to Needs of Gifted			27	13.24
Establish Learning Centers			11	5.39
Provide Financial Resources			44	21.57
Educate Legislator			11	5.39
Educate Public			44	21.57
Educate Teachers			12	5.88
Other			8	3.92
Not Ascertainable			23	11.27
Total	204	100.0	197*	96.56

*Total exceeds 141 since respondents were allowed a total of 4 possible answers.

Is there a need for public relations work concerning programs for the **gifted**?

.....**Yes** □ .....**No** □

If yes, what is the best way to communicate with the community at large ?

Response	Total	
	Frequency	Percent
Yes	196	96.08
No	4	1.96
Not Ascertainable	4	1.96
Total	204	100.00

Method of Communication	"Yes" Subtotal	
	Frequency	Percent
Use Communication Media - Radio, TV, and Newspaper	121	59.31
Experts Speaking Before Community Groups	50	24.51
Use Parents of Gifted to Publicize Needs	29	14.23
Show Benefits to Society/Community From Gifted Programs	29	14.23
Visit Gifted Programs	21	10.29
Individual Contacts	12	5.88
Establish Local Gifted Association	8	3.92
Involvement of Legislators	5	2.45
Other	10	4.90
Not Ascertainable	17	8.33
Total	302*	148.04

*Total exceeds 204 because each respondent could give 2 answers. Percent is based on 204.

What in your opinion are the main sources of opposition to special education for the **gifted** in your state ?

Sources of Opposition	Frequency	Percent
Belief That Gifted can Manage for Themselves	33	16.18
Belief That **Heterogeneous Grouping is Best**	4	1.96
Belief That Special Classes for Gifted are **Elitist**	28	13.73
Lack of Awareness (General)	51	25.00
Lack of Funds	92	45.10
Apathy	20	9.80
Other Priorities for Special Education	37	18.14
No Opposition	7	3.43
Other	13	6.37
General Anti-Intellectual Attitude	13	6.37
Educators	6	2.94
Not Ascertainable	20	9.80
Total	324*	158.82

*Total exceeds 204 because each respondent could give 4 possible answers. **Percent is based on 204.**

What can be done to change unfavorable attitudes if you believe there is a need to do so ?

Changing Unfavorable Attitudes	Frequency	Percent
Publicize Information About Gifted to Lay Public	104	50.98
Educate Educators to Needs of Public	25	12.25
Involve Parents	10	4.90
Educate Legislators	17	8.33
Observe Gifted in Classroom	11	5.39
Publicize Effective Programs	32	15.69
Demonstrate Need Through Complete Identification of Gifted	12	5.88
Don't Know	5	2.45
Other	12	5.88
Not Ascertainable	57	27.94
Total	285*	139.69

*Total exceeds 204 because two answers could be given by each respondent. Percent is based on 204.

Please assess the overall attitude toward education programs for the **gifted** of:

a. Federal, state and local education agencies

b. Voters in your state and locality

Then estimate the amount of financial support that has been given or would be given to these programs by each group.

Source of Support	Attitude															
	Strongly Negative Attitude		Negative Attitude		Neutral		Positive Attitude		Strong Attitude		Don't Know		Not Ascertainable		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Education Agencies																
Local	2	0.98	35	17.16	55	26.96	86	42.16	7	3.43	2	0.98	17	8.33	204	100.00
State	2	0.98	22	10.78	50	24.51	100	49.02	15	7.35	3	1.47	12	5.88	204	100.00
Federal	4	1.96	29	14.22	79	38.73	68	33.33	4	1.96	3	1.47	17	8.33	204	100.00
Voters																
Local Level	8	3.92	46	22.55	76	37.25	48	23.53	6	2.94	3	1.47	17	8.33	204	100.00
State Level	10	4.90	44	21.57	86	42.16	34	16.67	6	2.94	3	1.47	21	10.29	204	100.00

Source of Support	Financial Support											
	No Financial Support		Inadequate Support		Adequate Support		Don't Know		Not Ascertainable		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Education Agencies												
Local	33	16.18	129	63.24	14	6.86	10	4.90	18	8.82	204	100.00
State	44	21.57	112	54.90	23	11.27	8	3.92	17	8.33	204	100.00
Federal	67	32.84	91	44.61	8	3.92	17	8.33	21	10.29	204	100.00
Voters												
Local Level	49	24.02	98	48.04	13	6.37	17	8.33	27	13.24	204	100.00
State Level	52	25.49	92	45.10	14	6.86	17	8.33	29	14.22	204	100.00

How would you assess the present attitude of each group below toward the investment of public funds in differentiated programs for the **gifted** ?

Attitude of Groups	Highly Unfavorable		Unfavorable		Neutral		Favorable		Highly Favorable		Not Ascertainable		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Attitude of Parents of Gifted	–	–	–	–	2	0.98	48	23.53	151	74.02	3	1.47	204	100.00
Attitude of Teachers of Gifted	–	–	–	–	2	0.98	30	14.71	169	82.84	3	1.47	204	100.00
Attitude of Teachers of Heterogeneous Classes	4	1.96	46	22.55	92	45.10	52	25.49	5	2.45	5	2.45	204	100.00
Attitude of Local Administrators	5	2.45	48	23.53	66	32.35	69	33.82	11	5.39	5	2.45	204	100.00
Attitude of State Administrators	5	2.45	31	15.20	57	29.94	86	42.16	18	8.82	7	3.43	204	100.00
Attitude of State Legislators	7	3.43	50	24.51	82	40.20	50	24.51	5	2.45	10	4.90	204	100.00
Attitude of Federal Legislators	3	1.47	37	18.14	85	41.67	65	31.86	2	0.98	12	5.88	204	100.00
Attitude of Gifted Children	–	–	1	0.49	16	7.84	81	39.71	100	49.02	6	2.94	204	100.00
Attitude of Lay Public	6	2.94	64	31.37	95	46.57	31	15.20	2	0.98	6	2.94	204	100.00

How much effort do you believe is being put forth by the various agencies responsible for instituting and maintaining programs for the **gifted** ? *(check one for each)*

Type of Agency	Little or No Effort		Some Disorganized Effort		Much Effort But Poorly Organized		Fairly Well Organized Effort		Very Well Organized		Not Ascertainable	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequecy	Percent
Local Agencies												
Urban	55	26.96	80	39.22	15	7.35	30	14.71	5	2.45	19	9.31
Suburban	41	20.10	67	32.84	31	15.20	42	20.59	1	0.49	22	10.78
Rural	127	62.25	40	19.61	6	2.94	6	2.94	1	0.49	24	11.76
State Agencies	48	23.53	51	25.00	18	8.82	64	31.37	5	2.45	18	8.82
Federal Agencies	92	45.10	55	26.96	8	3.92	19	9.31	3	1.47	27	13.23

What are the most effective methods of stimulating positive interest in programs for the **gifted** ?

Rank	Methods of Stimulating Positive Interest	Frequency	Percent
1	Use Communication Media to Inform Public	70	34.31
2	Use Model Programs on Gifted	53	25.98
3	Educate School Staff in Needs of Gifted	35	17.16
4	Enlist Parents of Gifted	29	14.22
5	Provide Funds for Programs	28	13.73
6	Not Ascertainable	25	12.25
7	Visits to Classes for Gifted	18	8.82
8	Community Involvement	18	8.82
9	Use Well Known Gifted Persons to Publicize Needs	16	7.84
10	Other	16	7.84
11	Show Benefits to Society From Gifted Programs	15	7.35
12	Use Consultant for Gifted	11	5.39
13	Publicize Gifted Programs Within Schools	11	5.39
14	Provide Funds for Research	9	4.41
15	Show That Gifted Programs Benefit all Children	9	4.41
16	Use Well Known Specialists in Gifted	7	3.43
17	Form Association for the Gifted	7	3.43
18	Include Information on Gifted in College Education Courses	5	2.45
19	Make Special Materials on Gifted Available to Teachers	5	2.45
	Total	387*	189.71

*Total exceeds 204 because each respondent could give three possible answers. Percent is based on 204.

To what extent should parents and students be involved in decisions affecting development and improvement of programs for the **gifted** ?

Extent of Involvement	Frequency	Percent
Somewhat More Than Average	43	21.08
Total Involvement, Extensive	115	56.37
Same Amount of Involvement as Average Parents/Students Have	16	7.84
Student Maximum Involvement, Parents Advisory	17	8.33
Not Ascertainable	13	6.37
Total	204	100.00

Currently Available Resources and Programs

3.39 In assessing the availability of programs for the gifted, less than 10% of the respondents said that most communities in their states have adequate programs available. At the elementary level, which was judged as the highest priority grade level (see 3.22), only 4% of the respondents said that most communities in their state have adequate programs. At the primary and junior high levels, these percentages were 1% and 3%, respectively. The respondents also indicated that programs are most frequently concentrated in large cities or in suburbs of large cities. Small cities and rural areas apparently are much less likely to have differentiated programs for their G&TC&Y. Trained teaching personnel also were found to be in short supply. Only 6% of the respondents indicated that there are adequate supplies of qualified teachers available in their states.

3.40 Respondents were asked to review a list of 16 possible uses of financial aid in differentiated programs for G&TC&Y. For almost every item about half said that no funds are available in their areas. Funding in the form of undergraduate aid for teachers is apparently least available; 77% of the respondents indicated that they knew of no funds for that purpose. The item with the best funding availability was "direct financial aid to school districts to assist in developing and sustaining programs"; nevertheless, 41% of the respondents said that no funds of that kind are available. Another 34% said that such funding is very limited, and 13% said it is slightly inadequate or adequate. All of the 15 remaining items had fewer funds available according to the respondents. They indicated that the primary source of funds in most cases is the state or the Federal Government, with very little support derived from the local school districts.

SELECTED REMARKS FROM RESPONDENTS CONCERNING
CURRENTLY AVAILABLE RESOURCES AND PROGRAMS

"The failure at the Federal level to include gifted in most of the exceptional child legislation is a national tragedy. If the Congress of the U.S. (supposedly bright people) do not value giftedness enough to give it a high priority, how can we peasants in the boondocks convince our local leaders?"

"The vital fact is that the gifted are not being adequately provided for. Teachers are not challenging them, legislators ignore them, and only the parents of gifted children weep for our failure to fulfill our promise of educating each individual to the level of his potential."

"This country has almost no place where a doctoral degree in the education of the gifted can be obtained (U. of Ga. is the exception) under people who know what they're doing. We are not even replacing our leaders in this area. When the next upswing in this area comes there will not be enough well-trained professors to train the teachers.

Also research funds have shrunk to almost nothing. We know so little about the potential of these children."

TABULATED RESPONSES CONCERNING CURRENTLY AVAILABLE RESOURCES AND PROGRAMS

Availability of programs for **gifted** children at the primary *(Grades K-3)* level may be best summarized as:

Availability of Programs at Primary Level	Present		Optimum	
	Frequency	Percent	Frequency	Percent
None at All	20	9.80	5	2.45
Only Rare, Isolated Cases	93	45.59	8	3.92
A Few Communities Have Adequate Programs Available	53	25.98	6	2.94
A Few Demonstration Facilities Exist	13	6.37	3	1.47
Most Communities Have Adequate Programs Available	2	0.98	27	13.24
Complete Programs are Available Throughout the State	1	0.49	93	45.59
Don't Know	10	4.90	10	4.90
Other	–	–	1	0.49
Not Ascertainable	12	5.88	51	25.00
Total	204	100.00	204	100.00

Availability of programs for **gifted** children at the elementary *(Grades 4-6)* level may be best summarized as:

Availability of Programs at Elementary Level	Present		Optimum	
	Frequency	Percent	Frequency	Percent
None at All	6	2.94	4	1.96
Only Rare, Isolated Cases	58	28.43	5	2.45
A Few Communities Have Adequate Programs Available	92	45.10	9	4.41
A Few Demonstration Facilities Exist	18	8.82	4	1.96
Most Communities Have Adequate Programs Available	8	3.92	22	10.78
Complete Programs are Available Throughout the State	1	0.49	105	51.47
Don't Know	10	4.90	7	3.43
Other	1	0.49	–	–
Not Ascertainable	10	4.90	48	23.53
Total	204	100.00	204	100.00

Availability of programs for **gifted** children at the jr. high school *(Grades 7-9)* level may be best summarized as:

Availability of Programs at Jr. High Level	Present		Optimum	
	Frequency	Percent	Frequency	Percent
None at All	4	1.96	2	0.98
Only Rare, Isolated Cases	66	32.35	6	2.94
A Few Communities Have Adequate Programs Available	86	42.16	9	4.41
A Few Demonstration Facilities Exist	18	8.82	4	1.96
Most Communities Have Adequate Programs Available	7	3.43	15	7.35
Complete Programs are Available Throughout the State	1	0.49	111	54.41
Don't Know	10	4.90	6	2.94
Other	1	0.49	–	–
Not Ascertainable	11	5.39	51	25.00
Total	204	100.00	204	100.00

Availability of programs for **gifted** children at the sr. high school *(Grades 10-12)* level may be best summarized as:

Availability of Programs at Senior High Level	Present		Optimum	
	Frequency	Percent	Frequency	Percent
None at All	4	1.96	1	0.49
Only Rare, Isolated Cases	49	24.02	7	3.43
A Few Communities Have Adequate Programs Available	94	46.08	8	3.92
A Few Demonstration Facilities Exist	15	7.35	6	2.94
Most Communities Have Adequate Programs Available	17	8.33	16	7.84
Complete Programs are Available Throughout the State	–	–	107	52.45
Don't Know	12	5.88	6	2.94
Other	1	0.49	1	0.49
Not Ascertainable	12	5.88	52	25.49
Total	204	100.00	204	100.00

Services for the **gifted** in my state are concentrated in the following areas: *(check all that apply)*

Services in State	Frequency	Percent
Large Cities	108	52.94
Suburbs of Large Cities	115	56.37
Small Cities	49	24.02
Rural Areas	20	9.80
There are no Services in My State	11	5.39
Don't Know	6	2.94
Other	10	4.90
No Concentration, Scattered	17	8.33
Not Ascertainable	9	4.41
Total	345	169.10

Is there an adequate supply of qualified personnel available to teach all the **gifted** children in your state ? .....**Yes** ☐ .....**No** ☐ .....**Don't know** ☐

Availability of Qualified Personnel	Frequency	Percent
Yes	12	5.88
No	158	77.45
Don't Know	29	14.22
Not Ascertainable	5	2.45
Total	204	100.00

Future Financing

3.41 The questions relating to funding for future programs revealed a high level of agreement as to what projects should receive money and a complete lack of agreement as to how much money would be needed. From a list of nine possible administrative spending priorities, three stood out as far more important than the rest: personnel, in-service teacher training, and program initiation funds. These were termed as essential administrative priorities by 70% of the respondents. Similar results occurred when a more elaborate weighting system combined the need for, and present availability of, 16 potential or existent financial aid programs into a single funding priority ranking. On this scale, financial aid for in-service training of teachers and other qualified resource personnel received the highest rating. The second priority was money for local education agencies to use for pilot and experimental projects. Third on the list was direct financial aid to school districts to assist in developing and sustaining programs.

3.42 Respondents were also asked to list in chronological order the first three steps to be taken in the event that special Federal financial assistance should become available for programs for the gifted and talented. A consolidation of these rankings for all 204 respondents indicated that their first priority would be to establish or strengthen the office of state level coordinator. This was mentioned almost twice as frequently as any other item. Next on the list was establishment of a state-wide in-service training program for teachers and/or administrators. Two items received the same tabulated score for third place on the list. These were direct aid to local education agencies and aid to universities to develop training programs for teachers of the gifted and talented.

Estimates of Program Cost

3.43 Many of the respondents admitted, however, that they were not able even to estimate the cost of some of the program items. Almost one quarter did not estimate the cost of 1 year in-service training for a teacher. About one-third said they thought such training should cost $1,000 or less, 20% estimated the cost as being between $1,000 and $3,500, and 20% estimated the cost to be more than $3,500.

3.44 Respondents also admitted a lack of familiarity with the financial considerations involved in a state-wide program to identify gifted and talented students. About 40% of the respondents either failed to provide a cost estimate or admitted that they did not know what would be an appropriate cost. The most frequently mentioned range was between $10,000 and $100,000. About 11% declined to suggest a specific figure. Instead, they offered a formula based on the number of children in the state. A question on the average cost of a state-wide program for G&TC&Y drew similar responses. Again, 40% of the respondents did not even attempt to answer. Slightly over 20% thought that the cost would not exceed $1 million, 19% thought the cost would be between $1 million and $8 million, and 8% thought it would be over $8 million. Another 12% proposed formulas that would base cost on the number of children in the state.

SELECTED REMARKS FROM RESPONDENTS CONCERNING FUTURE FINANCING

"The key to the initiation and development of differentiated programs for gifted and talented is the availability of categorical funds at Federal, state and local levels. A small staff at the Federal level is needed as a central service to which state personnel can turn. The Federal staff should administer some discretionary funds for national concerns, other funds should go directly to states. State staffs are key to state programs for the gifted—they can provide linkages between services (institutions of higher education, material resources, etc.) and local needs. Local staffs should be operational and among other things should be concerned with the redirection of ineffectively used resources—human and material."

TABULATED RESPONSES CONCERNING FUTURE FINANCING

To which of the following uses of financial aid should administrators give priority ? *(Rank in order, using Number 1 as the highest priority, then rate the importance of each type of funding)*

Uses of Financial Aid	Not Important		Important		Essential		Not Ascertainable		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Personnel	1	0.49	27	13.24	152	74.51	24	11.76	204	100.00
Supplies and Equipment	11	5.39	91	44.61	75	36.76	27	13.24	204	100.00
Library Resources	7	3.43	95	46.57	73	35.78	29	14.23	204	100.00
Funds for Study Trips	30	14.71	111	54.41	30	14.71	33	16.18	204	100.00
In-Service Teacher Training	1	0.49	33	16.18	147	72.10	23	11.27	204	100.00
Specialized Lay Consultants	38	18.63	106	51.96	25	12.25	35	17.16	204	100.00
Salaries for Program Coordinators	10	4.90	74	36.27	89	43.63	31	15.20	204	100.00
Program Initiation Funds	4	1.96	33	16.18	141	69.12	26	12.75	204	100.00
Program Improvement Funds	4	1.96	76	37.25	96	47.10	28	13.73	204	100.00
Other	0	0	2	0.98	9	4.41	193	94.61	204	100.00

To determine the relative priority of the uses of financial aid, the following point system was used. First choice - nine points, second choice - eight points, etc., down to the ninth choice which was one point. The total points for each level of priority were then added together to give the overall priority ranking. See listing below for actual priority rank.

PRIORITY RANKING

Rank	Priorities	Tabulated Score
1	Personnel	1,368
2	In-Service Teacher Training	1,299
3	Program Initiated Funds	1,238
4	Salaries for Program Coordinator	904
5	Supplies and Equipment	820
6	Program Improvement Funds	785
7	Library Resources	728
8	Specialized Lay Consultants	453
9	Funds for Study Trips	430

.To which of the following uses of financial aid should administrators give priority ? ***(Rank in order, using Number 1 as the highest priority, then rate the importance of each type of funding)***

Use of Financial Aid	First Choice		Second Choice		Third Choice		Fourth Choice		Fifth Choice		Sixth Choice		Seventh Choice		Eighth Choice		Ninth Choice		Not Ascertainable		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Personnel	77	37.75	40	19.61	19	9.31	18	8.82	13	6.37	5	2.45	7	3.43	1	0.49	2	0.98	22	10.78	204	100.00
Supplies and Equipment	–	–	16	7.84	23	11.27	26	12.75	34	16.67	26	12.75	17	8.33	22	10.78	6	2.94	34	16.67	204	100.00
Library Resources	1	0.49	5	2.45	14	6.86	19	9.31	33	16.18	40	19.61	36	17.65	15	7.35	4	1.96	37	18.14	204	100.00
Funds for Study Trips	–	–	3	1.47	5	2.45	7	3.43	8	3.92	14	6.86	34	16.67	44	21.57	43	21.10	46	22.55	204	100.00
In-Service Teacher Training	39	19.12	45	22.10	37	18.14	31	15.20	15	7.35	15	7.35	2	0.98	1	0.49	–	–	19	9.31	204	100.00
Specialized Lay Consultants	1	0.49	2	0.98	6	2.94	12	5.88	8	3.92	21	10.29	25	12.25	28	13.73	59	28.92	42	20.59	204	100.00
Salaries for Program Coordinators	23	11.27	18	8.83	23	11.27	21	10.29	21	10.29	13	6.37	20	9.80	17	8.33	15	7.35	33	16.18	204	100.00
Program Initiation Funds	40	19.61	46	22.55	34	16.67	24	11.76	14	6.86	8	3.92	5	2.45	4	1.96	3	1.47	26	12.75	204	100.00
Program Inprovement Funds	3	1.47	10	4.90	25	12.25	23	11.27	36	17.65	18	8.82	15	7.35	23	11.27	22	10.78	29	14.22	204	100.00
Other	4	1.96	1	0.49	–	–	1	0.49	1	0.49	1	0.49	–	–	1	0.49	–	–	195	95.59	204	100.00

The following pages contain a list of possible ways to use financial aid for the education of **gifted** children. Beside each is a 4-point scale on which you are asked to indicate the usefulness of the aid described in the statement. *(circle all that apply)*

Type of Aid	Not Needed		Necessary to Start Programs		Necessary to Continue Programs		Necessary to Start, Continue Programs		Necessary to Improve Programs		Necessary to Start, Improve Programs		Necessary to Continue, Improve Programs		Necessary to Start, Continue Improve Programs		Not Ascertainable	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Pre-service (Under graduate) Financial Aid for Teachers of the Gifted	65	31.68	69	33.82	10	4.90	11	5.39	17	8.33	3	1.47	2	0.98	21	10.29	6	2.94
Graduate Level Financial Aid for Teachers of the Gifted	10	4.90	63	30.88	19	9.31	9	4.41	39	19.12	4	1.96	9	4.41	45	22.06	6	2.94
Graduate Level Financial Aid for Pupil Personnel Specialists	32	15.69	58	28.43	19	9.31	9	4.41	47	23.04	4	1.96	7	3.43	20	9.80	8	3.92
Graduate Level Financial Aid for Consultant Personnel	23	11.27	58	28.43	19	9.31	4	1.96	41	20.10	8	3.92	8	3.92	35	17.16	8	3.92
Financial Aid for In-service Training of Teachers and Other Qualified Research Personnel	2	0.98	61	29.90	16	7.84	6	2.94	40	19.61	7	3.43	4	1.96	63	30.88	5	2.45
Support for Research	13	6.37	34	16.67	13	6.37	1	0.49	91	44.61	2	0.98	12	5.88	33	16.18	5	2.45
Grants for Development of Curricula for Gifted	12	5.88	45	22.06	15	7.35	2	0.98	52	25.49	7	3.43	12	5.88	53	25.98	6	2.94
A National Instructional Materials Center for the Development, Dissemination of Curricular Materials	33	16.18	44	21.57	10	4.90	2	0.98	61	29.90	8	3.92	10	4.90	31	15.20	5	2.45
Grants to State Education Agencies, to Provide Services for the Gifted Offered by State Departments of Education	26	12.75	51	25.00	17	8.33	9	4.41	30	14.71	9	4.41	8	3.92	48	23.53	6	2.94
Direct Financial Aid to School Districts to Assist in Developing and Sustaining Programs for the Gifted	14	6.86	53	25.98	21	10.29	12	5.88	30	14.71	8	3.92	4	1.96	57	29.94	5	2.45
Federally Funded Regional Demonstration Centers	31	15.20	70	34.31	11	5.39	–	–	37	18.14	20	9.80	2	0.98	27	13.24	6	2.94
Materials and Equipment Grants to Local Education Agencies	31	15.20	60	29.41	19	9.31	2	0.98	30	14.71	11	5.39	6	2.94	39	19.12	6	2.94
Grants to Local Education Agencies for Pilot and Experimental Programs for the Gifted	12	5.88	85	41.67	9	4.41	2	0.98	35	17.16	24	11.76	3	1.47	29	14.22	5	2.45
Financial Support for the Development of Models to Evaluate Programs	10	4.90	48	23.53	17	8.33	2	0.98	85	41.67	6	2.94	10	4.90	21	10.29	5	2.45
Grants to Support State Agency Staff	34	16.67	60	29.41	19	9.31	6	2.94	36	17.65	6	2.94	4	1.96	34	16.67	5	2.45
Other	4	1.96	4	1.96	–	–	–	–	3	1.47	2	0.98	1	0.49	3	1.47	190	93.14

Below is a list of financial aid programs (both actual and hypothetical). After each item is a scale on which you are asked to indicate the current availability of funds for the program and the primary source of these funds, based on your personal knowledge. If you know of no funds available for the item, skip the primary source question for that item.

	Availability										Primary Source									
	No Funds Available		Very Limited Funds Available		Slightly Inadequate Funds Available		Adequate Funds Available		Not Ascertainable		Local Level		State Level		Federal Level		Don't Know		Not Ascertainable	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Pre-service (Undergraduate) Financial Aid for Teachers	158	77.45	12	5.88	6	2.94	1	0.49	27	13.23	1	0.49	8	3.92	6	2.94	10	4.90	179	87.75
Graduate Level Financial Aid for Teachers	101	49.51	71	34.80	4	1.96	2	0.98	26	12.74	16	7.84	28	13.73	25	12.25	11	5.39	124	60.78
Graduate Level Financial Aid for Pupil Personnel Specialists	111	54.41	53	25.98	7	3.43	4	1.96	29	14.22	9	4.41	17	8.33	28	13.73	12	5.88	138	67.65
Graduate Level Financial Aid for Consultant Personnel	123	60.29	49	24.02	1	0.49	2	0.98	29	14.22	11	5.39	16	7.84	15	7.35	10	4.90	152	74.51
Financial Aid for In-Service Training of Teachers and Other Qualified Resource Personnel	89	43.63	74	36.27	10	4.90	4	1.96	27	13.23	24	11.76	39	19.12	21	10.29	7	3.43	113	55.39
Support for Research	86	42.16	77	37.75	13	6.37	3	1.47	25	12.25	8	3.92	25	12.25	51	25.00	7	3.43	113	55.39
Grants for the Development of Curriculum for the Gifted	106	51.96	61	29.90	6	2.94	3	1.47	28	13.77	7	3.43	27	13.24	30	14.71	6	2.94	134	65.69
A National Instructional Material Center for the Development and Dissemination of Curricular Materials	138	67.65	25	12.25	6	2.94	1	0.49	34	16.67	–	–	4	1.96	23	11.27	11	5.39	166	81.37
Grants to State Ed. Agencies to Improve Services Offered by State Departments of Ed.	100	49.02	59	28.92	10	4.90	1	0.49	34	16.67	–	–	16	7.84	46	22.55	6	2.94	136	66.67
Direct Financial Aid to School Districts to Assist in Developing and Sustaining of Education Programs	83	40.69	70	34.31	20	9.80	6	2.94	25	12.25	5	2.45	67	32.84	17	8.33	5	2.45	110	53.92
Federally Funded Regional Demonstration Centers	142	69.61	25	12.25	5	2.45	3	1.47	29	14.22	1	0.49	5	2.45	28	13.73	3	1.47	167	81.86
Material and Equipment Grants to Local Education Agencies	103	50.49	61	29.90	7	3.43	4	1.96	29	14.22	4	1.96	37	18.14	26	12.75	4	1.96	133	65.20
Grants to Local Education Agencies for Pilot and Experimental Projects for the Gifted	86	42.16	78	38.24	13	6.37	2	0.98	25	12.25	6	2.94	42	20.59	42	20.59	4	1.96	110	53.92
Financial Support for the Development of Models to Evaluate Programs for the Gifted	125	61.27	41	20.10	7	3.43	4	1.96	27	13.23	4	1.96	29	14.22	17	8.33	5	2.45	149	73.04
Grant to Support State Agency Staff	102	50.00	53	25.98	8	3.92	8	3.92	33	16.18	–	–	37	18.14	30	14.71	5	2.45	132	64.71

To determine the priority ranking of the uses of financial aid based on need and current availability, the following equations were used:

Priority of need for each item = USEFULNESS X AVAILABILITY

Usefulness	=	sum of points for items listed		Availability	=	one of the following	
Not needed	=	0 points		No funds available	=	3 points	
Needed to start, continue and/or improve	=	1 point		Limited funds available	=	2 points	
If needed to start, continue and/or improve, circle as one of 5 most important	=	5 points		Adequate funds available	=	0 points	
Total Usefulness	=	0, 1 or 5	X	Availability	=	3,2,1 or 0	= Need for each item according to each respondent

PRIORITY SCALE

1. Sum individual needs for each item for all 204 respondents
2. Divide total by number of respondents
3. This number = average priority of each item
4. Rank averages in order. #1 = highest priority, etc.

Priority ranking of uses for Federal aid based on the need for such aid and its current availability.

PRIORITY RANKING

Rank	Uses of Financial Aid	Tabulated Score
1	Financial Aid for In-Service Training of Teachers and Other Qualified Resource Personnel	1102.08
2	Grants to Local Education Agencies for Pilot and Experimental Projects for the Gifted	1098.90
3	Direct Financial Aid to School Districts to Assist in Developing and Sustaining Programs for the Gifted	1050.57
4	Graduate Level Financial Aid for Teachers of the Gifted	970.63
5	Grants for the Development of Curricula for the Gifted	865.76
6	Grants to State Education Agencies to Provide Services for the Gifted Offered by State Departments of Education	809.84
7	Financial Support for the Development of Models to Evaluate Programs	759.69
8	Federally Funded Regional Demonstration Centers	759.23
9	Support for Research	737.50
10	Graduate Level Financial Aid for Consultant Personnel	628.59
11	A National Instructional Materials Center for the Development and Dissemination of Curricular Materials	578.28
12	Materials and Equipment Grants to Local Education Agencies	560.38
13	Grants to Support State Agency Staff	516.76
14	Preservice (Undergraduate) Financial Aid for Teachers of the Gifted	454.59
15	Graduate Level Financial Aid for Pupil Personnel Specialists	367.29

If Federal funds were made available to initiate a nationwide program for differentiated education for the gifted, what would be the chronological order in which this money should be spent to insure maximum long range efficiency?

(Rank the first step as 1, the second as 2, and the third as 3.)

Rank only the first three steps.

Grants Should be Made:	1		2		3	
	Freq	Percent	Freq	Percent	Freq	Percent
To States to Establish or Strengthen an Office at the State Level to Plan and Coordinate an Overall Statewide Program for the Gifted	97	47.55	21	10.29	16	7.84
To States to Identify Gifted	6	2.94	17	8.33	29	14.22
To States to Distribute Directly to Local Education Agencies	27	13.24	37	18.14	35	17.16
To States to Establish Statewide In-Service Training Programs for Teachers and/or Administrators From Local School Districts	20	9.80	57	27.94	35	17.16
To States to Train Officials to Prepare Them to Begin Planning of Programs	8	3.92	20	9.80	20	9.80
To Universities to Develop Training Programs for Teachers of Gifted	33	16.18	32	15.69	27	13.24
To Universities to Develop Curricula for Gifted	1	0.49	11	5.39	10	4.90
To Universities to Perform Basic Research on Gifted	6	2.94	2	0.98	22	10.78
Other	3	1.47	3	1.47	5	2.45
Not Ascertainable	3	1.47	4	1.96	5	2.45
Total	204	100.00	204	100.00	204	100.00

If Federal funds were made available to initiate a nationwide program for differentiated education for the gifted, what would be the chronological order in which this money should be spent to insure maximum long range efficiency?

(Rank the first step as 1, the second as 2, and the third as 3.)

Rank only the first three steps.

PRIORITY RANKING

Rank	Grants Category	Tabulated Score
1	To States to Establish or Strengthen an Office at the State Level to Plan and Coordinate an Overall State-Wide Program for the Gifted	349
2	To States to Establish Statewide In-Service Training Programs for Teachers and/or Administrators From Local School Districts	209
3	To States to Distribute Directly to Local Education Agencies	190
4	To Universities to Develop Training Programs for Teachers of Gifted	190
5	To States to Train Officials to Prepare Them to Begin Planning of Programs	84
6	To States to Identify Gifted	81
7	To Universities to Perform Basic Research on Gifted	44
8	To Universities to Develop Curricula for Gifted	35

What is a reasonable estimate of the cost of in-service preparation of one teacher of the **gifted** over a one-year period ? Base your estimate on any items you feel to be relevant.

Cost in Dollars	Frequency	Percent
0 - 100	8	3.92
101 - 200	5	2.45
201 - 500	24	11.76
501 - 1000	35	17.16
1001 - 1500	16	7.84
1501 - 2500	18	8.82
2501 - 3500	9	4.41
3501 - 5000	15	7.35
5001 +	26	12.75
Not Ascertainable	48	23.53
Total	204	100.00

What do you feel would be a minimum average cost per year for a five-year, state-wide program to identify the **gifted** ?

Cost in Dollars	Frequency	Percent
10,000 or less	9	4.41
10,001 - 100,000	40	19.61
100,001 - 250,000	16	7.84
250,001 - 1 million	18	8.82
1,000,001 - 3 million	14	6.86
3,000,001 - 8 million	3	1.47
Over 8 million	1	0.49
Formula Based on Number of Children in State	22	10.78
Don't Know	35	17.16
Not Ascertainable	46	22.55
Total	204	100.00

What do you feel would be a minimum average cost per year for a five-year, state-wide program to provide differentiated education for those identified as **gifted** ?

Cost in Dollars	Frequency	Percent
10,000 or less	2	0.98
10,001 - 100,000	6	2.94
100,001 - 250,000	8	3.92
250,001 - 1 million	27	13.24
1,000,001 - 3 million	20	9.80
3,000,001 - 8 million	18	8.82
Over 8 million	16	7.84
Formula Based on Number of Children in State	24	11.76
Don't Know	36	17.65
Not Ascertainable	47	23.04
Total	204	100.00

FINAL COMMENTS OF RESPONDENTS

3.45 At the end of the questionnaire, the respondents were asked to list the three most important outcomes desired from differentiated programs for gifted and talented, and to state any priorities that were inadequately covered in the questionnaire. In answering the first of these questions the respondents expressed a high level of concensus. The desired outcomes of differentiated education most frequently listed were benefits to the child's intellectual or social development; improvements in the quality and quantity of the human resources available in the society; improvements in the overall educational system. All but 34 of the 443 answers to this question fell into one of these categories. The degree of unanimity is especially significant because the question was open-ended and respondents could give any answer they wished.

3.46 The last question was intended to give respondents an opportunity to state any priorities that might have been omitted from the questionnaire. Most, however, used the space to describe what they thought should be emphasized in a program for G&TC&Y (even if they had already stated the same views in response to previous questions), and to make general comments on a number of matters from the quality of the questionnaire to the quality of U.S. education. Since many of these comments were useful and some were even eloquent, each was counted and categorized regardless of whether it was specifically addressed to the question. All comments that did not pertain to the questionnaire itself were listed as "potential priorities." Only 11 of these were noted by 5 or more respondents and none of the "potential priorities" was listed by more than 15 respondents. The most frequent comment was that funding is needed for programs for G&TC&Y. Most of the respondents who wrote this did not suggest that funding had been neglected in the questionnaire but that funding is urgently needed and long overdue in their states. The third most frequent comment, that "the gifted have been neglected too long" reflects a similar attitude. Of all 11 priorities noted by 5 or more individuals, only 3 were not covered at all in the questionnaire. These 3 are special need areas that are not common to all gifted. Each is probably important enough to warrant a full study by itself. The 3 areas were: needs of culturally disadvantaged gifted and talented; needs of psychologically disturbed gifted and talented; needs of highly gifted and talented. Since not all members of the sample were specialists in these areas, this survey unfortunately could not address itself in any depth to these specific problem areas.

3.47 Favorable and unfavorable comments on the questionnaire also were tabulated. There was a total of 10 negative comments and 22 positive comments. Slightly over half of the respondents, either because they knew of no priorities omitted or because they were exhausted from filling out a 24-page questionnaire, skipped the last question entirely.

SELECTED FINAL COMMENTS OF RESPONDENTS

"If the various priorities covered in this questionnaire can be effected even partially, both by the individual states as well as through federal professional and financial assistance, considerable upgrading of educational programs for the gifted could be shown. This questionnaire, in our opinion, represents one of the best of its type we have experienced. Some ambiguity is built in, however, when 'gifted' and 'talented' are equated."

"This survey is the most comprehensive instrument I have ever seen."

"The questionnaire has been thoughtfully designed!"

"You ignored controversy over proportionate involvement of all cultural and ethnic minorities. You overemphasized importance of teacher preparation. Do we really need another incentive for colleges to 'find' ways to squander public funds? The gifted need association with the truly gifted adult who may or may not be a teacher. You offered no alternative for getting funding directly to students in the form of scholarships, project grants, travel and (evil of evils) even private school tuition."

"I fear that the approach being made is too largely one of the types made on behalf of the handicapped. The tendency is to start with defining a category of children and assume that they need to be identified and then allocated in some special way. I believe the problem requires a much more complicated approach in which we research carefully the programs that might be useful to very good, high performing students. And then consider the question of who is better served in these programs than elsewhere. We should avoid easy starting points like high-IQ, high scores on Guilford tests, or teacher nominations. We greatly need to establish a few centers of real excellence in the field which will dedicate efforts to reconceptualizing this whole field. Old approaches are dead and I leap to seeing ghosts in this questionnaire."

"Please don't stress personality and social factors; avoid tendency to adjust these people into conventional frames. Give them the right to 'march to a different drummer.'"

"Let's get an adequate amount for the academically talented.... We as a nation can <u>not</u> afford to lose <u>their talent</u>; many are not going on to college, writing their books, or becoming the future Hemingways, Frank Lloyd Wrights, <u>et al</u>."

"From my experience in a large city school system down to rural southwest Wisconsin, the type of program this survey seems to be pushing is <u>not</u> practical. But nearly any school system from the largest to the smallest can be equipped with little or no added expense to have classrooms or learning centers with a variety of materials at many levels of difficulty. Nearly all learners can progress at their own rate using their own individual learning styles.... More schools are doing it all over the country. North Dakota is getting national recognition for moving in this direction. We are slowly moving this way in Wisconsin. Dozens of books on contemporary education are promoting the idea of the open type self selection classroom.... I am convinced that concerned dedicated humane teachers can do much more for the gifted in this way than in a special program for a special group that will cost a heap more money."

"Development of creative problem solvers with human attitudes who will make a desired impact on society." (Outcome of differentiated programs for G&TC&Y.)

"Federal level. 1) Establish some specific leadership in gifted-child education and talent development at the Federal level in the U.S. Office of Education. 2) Help to establish some leadership in this area at the state level especially in states where there is presently a void. 3) Establish and fund research pilot projects throughout the nation to re-examine identification procedures and to experiment with innovative program designs. 4) Set up a national information-retrieval and research-dissemination exchange system specifically for gifted-child education and talent development. 5) Extend financial assistance to those educators being trained to work with gifted children."

"I feel that all priorities concerning the education of gifted and talented have been fully covered. In fact, the questionnaire itself is somewhat overwhelming in its comprehensiveness and attention to vital details of major problem areas.

A minor suggestion from one 'out in the field' which could prove to become significant along the way, is to tone down or to remove the word 'special' from the language describing programs for the gifted. Untold numbers of tempests in a teapot have resulted from its use through years. To the layman (taxpayer) the gifted child is not special—he is more of a threat. To many teachers, the word connotes just one more tangent and just one more effort to place children into carefully labelled little boxes. All of this creates opposition, some from those who would be highly in favor of 'appropriate' programs for the gifted. I am finding that special educators, who have done more than any other group to bring about such programs, are expressing this same opinion.

Since we are entering into an era of shift of emphasis for the retarded, the learning disabled and the physically handicapped, I plead that we not make the same mistake with the gifted child."

"I doubt whether this extremely comprehensive questionnaire missed any of the important areas."

"This questionnaire seems extremely narrow. It tends to define programs for gifted in traditional and academic terms. What is especially worrisome is that it treats both 'giftedness' and 'programs' as unitary terms rather than the diverse collectives they are."

"I feel the interest in the gifted of several years ago has lessened because of the current interest in the plight of the poor and disadvantaged youngster. People have felt that grouping procedures are simply one more way of discriminating against those who are already discriminated against. This is a very legitimate observation, and in providing for the needs of the gifted, we must take care not to create a system of elitism. We must also take into account all the current skepticism about IQ tests. IQ's should be considered a limited way of looking at intelligence. I feel that in identifying gifted students, more should be done in the area of taking interests into account—so that students would have more opportunity to select programs (and group themselves) more in accordance with their interests. Also, in the process of identifying gifted students, the question must be kept in mind—identifying them for what? I think that identification procedures cannot really be very meaningful until whoever is doing the identifying has a purpose in mind. Just 'identifying' the gifted, in sort of a vacuum, is a jejune task, it seems to me."

"Ivan Illitch's ideas are too compelling to ignore. We need to consider—in all professions—ways to enter and qualify that are not linked to years of schooling. Qualification by tests of performance (to replace certification based on schooling) would be important in stimulating the education (which is not necessarily the schooling) of the gifted."

"I believe that social adjustment is most essential. Psychological, and sometimes psychiatric, help should be utilized to help the talented student fit into the 'picture' of life with his high academic and gifted potential. He should realize that he has much to offer his talent for the service of society and at the same time become a member of society. He needs direction so that society will receive the maximum benefit of his ability."

"Several years ago the public was being exposed to information regarding the individual differences of the gifted and the need for special educational programming. There has been very little writing about these needs recently. I believe the public holds our bright youth responsible for many of the nation's social problems and social unrest. I believe I detect an anti-intellectual feeling in a large segment of the public which would reduce the possible support for funding programs for the gifted. We need to win back the friends we had. A journalist(s) who communicates well with the public could be commissioned to prepare articles for public consumption. Among other things, these articles might re-emphasize to the nation that it takes very bright people with well developed abilities to solve complex problems; it is important that we support methods for developing such abilities."

'This questionnaire is without question one of the best (i.e., comprehensive and probing) I have ever seen. A version of it should be designed for use by the separate states with emphasis on obtaining feedback (bases?) from LEA's and from individuals who either know or claim they know something relevant about education."

"A better payoff of talented and gifted individuals. We need more benevolence in our society; and we can't depend on refugee training as we did in the 1930's." (Outcome of differentiated programs for G&TC&Y.)

TABULATED FINAL COMMENTS

As a final note please identify the three most important outcomes desired from differentiated programs for gifted and talented.

Important Outcomes of a Differentiated Program for Gifted and Talented (3 answers permitted)	Freq	Percent
Utilization of Child's Potential	147	72.10
Social Adjustment of Child	75	36.76
Improved Human Resources for Society	120	58.82
Improved Educational System	67	32.84
Makes Education More Individualized	9	4.41
Identification of Gifted from Culturally Deprived Environment	4	1.96
Increased Understanding of Problems of Gifted	9	4.41
Put Proper Emphasis on Intelligence	4	1.96
More Research	1	0.49
Identification of Gifted	5	2.45
Should Not Alienate Non-Gifted	2	0.98
Subtotal	443	217.16
Not Ascertainable	23	11.27
Total	466*	228.43

*Total exceeds 204 because each respondent could give 3 possible answers. Percent based on 204.

If you feel that any urgent priorities concerning education for the gifted and talented have not been adequately covered in this questionnaire, please describe them below.

Urgent Priorities (All Responses Tabulated)	Frequency	Percent
Funding is Needed	15	7.35
Needs of Culturally Disadvantaged Gifted	14	6.86
Gifted Have Been Neglected Too Long	9	4.41
If Voters are Well Informed About Needs, They Support Gifted Programs	8	3.92
Federal People Must Take Initiative	7	3.43
Identification is Needed	7	3.43
Psychological Problems of Gifted (Emotionally Disturbed Gifted)	6	2.94
Other Need	6	2.94
Role of Creativity	5	2.45
Needs of Highly Gifted	5	2.45
Emphasis on Individual Learning	5	2.45
Evaluation is Needed	5	2.45
Staff at State Level is Needed	4	1.96
Parents' Role Should be Emphasized	3	1.47
Preschoolers	3	1.47
Administrative Arrangements	3	1.47
Learning Centers with Wide Range Materials or Special Individualized Learning	3	1.47
Teacher Selection is Important	3	1.47
Talent Loss Must be Stopped	3	1.47
Communication Between Federal - State Education Agencies Needed	3	1.47
Importance of Motivation	2	0.98
Underachievers	2	0.98
Staff at Federal Level is Needed	2	0.98
Disseminate Information to Professionals	2	0.98
Communication Between State - Local Education Agencies Needed	2	0.98
Maximum Use of Community Resources (Community Involvement)	2	0.98
More Research Needed	2	0.98
Need for Vocational Guidance	1	0.49
Need Graduate Level Training in Teaching Gifted	1	0.49
The Implication that Average Students Don't Need a Good Education	1	0.49
Greatest Neglect is Junior High Level Gifted	1	0.49
Acceleration Instead of Grouping	1	0.49
Retired Experts Used for Instructors of Gifted	1	0.49
Gifted Need Separate School	0	0.00
Favorable Comment on Questionnaire	22	10.78
Unfavorable Comment on Questionnaire	5	2.45
Questionnaire Format Cannot Get Sufficient Depth	3	1.47
Approach in Questionnaire is Too Traditional	2	0.98
Subtotal	169	82.84
No Comment	106	51.96
Total	275*	134.80

*Total exceeds 204 because the respondents were allowed more than one answer and all were counted. Percent based on 204.

IV. SCHOOL STAFFING SURVEY

INTRODUCTION

4.1. The School Staffing Survey of April 1970 is a three-part inventory of a representative sample of U.S. public schools. The purpose of the survey was to provide the National Center for Educational Statistics with statistical data needed to present an overall picture of various characteristics of U.S. elementary and secondary schools. Information on staffing patterns, provisions for instruction of handicapped pupils, teacher turnover, and other similar items were collected. These statistics were needed for a report that Congress directed the U.S. Commissioner of Education to make on the condition and progress of the education professions. The survey data also were needed by various government agencies and bureaus to assess future needs and to develop plans to meet those needs.

4.2 Of the three questionnaire forms used in the survey, only one (Form Y) was used in the present analysis. This instrument covered programs provided for 11 different types of exceptional children. Mentally gifted pupils were the fourth type of exceptional children referred to, and the only group not considered "handicapped." The questionnaire was addressed to the school principal and was to be filled out by the principal or a member of his immediate staff.[1/]

4.3 In addition to being classified as elementary or secondary schools, the survey sample was divided into three groups by the size of the community in which they were located. "Large City" schools were those located in one of the 135 cities with a population of over 100,000 in 1960. About 20% of the

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1/ See Advocate Survey (Chapter III) identification section for assessment of principals' ability to identify gifted.

elementary and secondary pupils attended such schools. The second classification was "Large City Metropolitan Surroundings," which included schools that, according to the 1960 census, were located inside the 72 standard metropolitan statistical areas but outside a "Large City." This group of schools, located in what are usually called suburban areas, represented about one third of the pupils at both the elementary and secondary levels. The third location classification was "Other Areas," which included all cities not counted in either of the first two groups and rural areas. This last classification was the largest of the three, representing almost as many pupils as the other two combined.

4.4 The definition of mentally gifted pupils given the principals in the survey instrument reads as follows: "Mentally Gifted Pupils are those whose level of mental development is so far advanced that they have been identified by professionally qualified personnel as in need of additional educational opportunities."

4.5 The principals were asked to report the number of students in their schools who met this definition and to state what types of special instruction, if any, were available to these pupils. Because the definition was necessarily vague and a child considered mentally gifted by one principal might not be so categorized by another, there was, apparently, some degree of difference among the principals as to which children should be included. Interviews with personnel directly involved in telephone attempts to standardize inputs from the principals revealed that some difficulties had been encountered. A number of principals, for instance, did not know whether all the members of a class in the highest of three ability groupings should be listed as mentally gifted. Others were not sure of what constituted identification by "professionally qualified personnel." Some felt this meant identification from intensive testing conducted by a staff psychologist; others said that their gifted were identified solely by the teachers who gave pupils the high grades necessary for inclusion in the highest "track" in the school.

OVERALL FINDINGS

4.6 These types of discrepancies are, at least in part, responsible for some of the rather surprising findings in the survey. For example, most U.S. school principals (57.5%) reported that their schools had no mentally gifted pupils at all. Even among large city secondary schools (average enrollment almost 1,500 students), 44% of the principals reported that not one of their students was mentally gifted. The majority of the high school principals of schools located in "other areas" (average enrollment of 700) reported that they had not a single mentally gifted pupil. Even in the elementary schools in the suburban areas classified as large city metropolitan surroundings (average enrollment 500), 55% of the principals reported that their schools had no mentally gifted pupils. [2/]

[2/] See Advocate Survey (Section III) findings on definition and identification of gifted for discussion of incidence of giftedness in average school population.

4.7 Some principals, on the other hand, reported large numbers of mentally gifted pupils. In the same large city secondary school group in which 44% said they had not one gifted student, 20% of the principals reported 10% or more mentally gifted students. This represents a higher incidence of giftedness than found by even the secondary school principals in suburban areas. Only 13% of those principals felt that 10% or more of their students were mentally gifted.

4.8 These figures, with more schools clustered around the extremes (no gifted or 10% or more gifted) than in the expected ranges (mentally gifted representing between 1% and 10% of the school population), suggest that the principals had problems of identifying the gifted, as is suggested by the consultants the Office of Education contracted to analyze the data. The consultants' comments are contained in a supplementary volume to this report.

4.9 The tables that follow display the incidence of mentally gifted pupils reported by the principals and the special instruction being given to these pupils. As mentioned, the "All Other Areas" category in the tables represents by far the largest number of pupils and schools. About half of the pupils and over half of the schools are in "All Other Areas." That category therefore represents as many actual cases as "Large City" and "Large City Metropolitan Surroundings" combined.

TABULATIONS CONCERNING INCIDENCE OF MENTALLY GIFTED PUPILS AND SPECIAL INSTRUCTION BEING GIVEN THEM

(as reported by principals)

TOTAL NUMBER OF SCHOOLS LOCATED IN EACH AREA
CLASSIFICATION USED IN TABLES
(Total of U.S. Schools = 81,018)*

Area Category	Elementary		Secondary	
	Number	Percent	Number	Percent
Large City	8,603	15.1	2,637	13.0
Large City Metro Surround	16,740	29.4	5,475	27.1
All Other Areas	31,589	55.5	12,108	59.9
Total	56,932	100.0	20,220	100.0

* Combined elementary and secondary (K-12) schools have been omitted. Sum of "elementary" and "secondary" columns is therefore slightly less than U.S. total.

TOTAL NUMBER OF PUPILS LOCATED IN EACH AREA CLASSIFICATION
USED IN SCHOOL STAFFING SURVEY TABLES
(Total of U.S. Pupils = 45,101,594)*

Area Category	Elementary		Secondary	
	Number	Percent	Number	Percent
Large City	5,081,250	20.3	3,817,409	21.4
Large City Metro Surround	8,401,197	33.6	5,761,906	32.3
Other Areas	11,502,601	46.1	8,259,440	46.3
Total	24,985,048	100.0	17,838,755	100.0

* Combined elementary and secondary (K-12) schools have been omitted. Sum of "elementary" and "secondary" columns is therefore slightly less than U.S. total.

PERCENTAGE OF U.S. SCHOOLS REPORTING
NO MENTALLY GIFTED PUPILS
(Total = 57.5% of All U.S. Schools)*

Area Category	Elementary	Secondary
Large City	48.6	44.0
Large City Metro Surround	55.7	44.0
Other Areas	68.0	51.0

* U.S. total information was not available in any further detail (e.g., large city total, other area total) on School Staffing Survey charts.

Derived from original NCES Table 4A-I(B) printout of Form Y, Question 12, Part M: "What is the total number of Mentally Gifted Pupils currently enrolled in this school?"

PERCENTAGE OF U.S. SCHOOLS REPORTING AT LEAST ONE
MENTALLY GIFTED PUPIL
(Total = 41.0% of All U.S. Schools)*

Area Category	Elementary	Secondary
Large City	50.3	55.7
Large City Metro Surround	43.7	54.3
Other Areas	30.3	45.8

* Total schools with gifted and without gifted does not quite equal 100% because the few schools that did not supply complete data are included in the 100%, e.g., 41% + 57.5% + 1.5% incomplete = 100.0%.

Table derived from original Table 4A-I(B) printout of School Staffing Survey Form Y, Question 12, Part M: "What is number of Mentally Gifted Pupils currently enrolled in this school?"

NUMBER OF GIFTED CHILDREN REPORTED AS
PERCENTAGE OF ENTIRE ENROLLMENT
(Total = 1,422,738 gifted children;
3.2% of total enrollment)

Area Category	Elementary	Secondary
Large City	3.4	6.3
Large City Metro Surround	2.3	4.6
Other Areas	2.2	3.4

Derived from original NCES Table 4D-I(B) printout of School Staffing Form Y, Question 12, Part M: "What is the total number of Mentally Gifted Pupils currently enrolled in this school?"

PERCENTAGE OF SCHOOLS REPORTING CERTAIN PERCENT OF THEIR ENROLLMENT TO BE GIFTED

Percent of Enrollment Reported as Gifted	All U.S. Schools N=81,018	Elementary			Secondary		
		Large City N=8,603	Large City Metro Surround N=16,740	Other N=31,589	Large City N=2,637	Large City Metro Surround N=5,475	Other N=72,108
No gifted in school	57.5	48.6	55.8	68.0	44.0	44.0	51.0
At lease 1 pupil but less than 9% enrollment gifted	35.4	41.8	39.8	27.2	35.3	41.6	38.6
10-19% gifted	3.6	5.2	3.6	1.5	16.6	7.3	4.0
20-29% gifted	1.0	2.2	0.1	0.4	1.7	4.1	1.6
30-39% gifted	0.8	0.4	0.0	1.3	1.5	1.3	0.9
40-49% gifted	0.2	0.5	0.0	0.0	0.5	0.0	0.8
50-89% gifted	0.0	0.2	0.1	0.0	0.0	0.0	0.0
90-100% gifted	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total*	98.6	98.9	99.4	98.4	99.6	98.3	96.9

* Totals do not add to 100% becaus small numbers of schools did not provide complete data.

Derived from original NCES Table 4I-1(b) printout of School Staffing Survey Form Y, Question 12, Part M: "What is the number of Mentally Gifted Pupils currently enrolled in this school?" and Form Y, Question 20: "What was the opening fall enrollment of your school?"

PERCENTAGE OF GIFTED PUPILS REPORTED AS RECEIVING SPECIALIZED INSTRUCTION BY TYPE OF INSTRUCTION AND TYPE OF SCHOOL

Classification of Pupils	All U.S. Schools N=1,422,738	Elementary			Secondary		
		Large City N=172,004	Large City Metro Surround N=191,273	Other N=254,601	Large City N=240,877	Large City Metro Surround N=263,051	Other N=269,637
Gifted pupils receiving no special instruction	30.9	35.3	38.3	42.4	9.1	15.7	40.8
Gifted pupils receiving all instruction in separate classes	12.5	33.5	3.5	4.4	20.5	12.3	7.6
Gifted pupils receiving part of instruction in separate classes	36.0	13.8	20.3	10.0	64.9	56.6	43.2
Total in separate classes (at home school)	48.5	47.3	23.8	14.4	85.4	68.9	50.8
Gifted pupils receiving individualized special instruction: (1) in regular classes from regular teachers	25.7	24.0	53.9	42.9	7.5	20.6	13.5
(2) from specialized professional personnel	3.4	1.7	6.2	1.6	1.7	7.6	1.8
Total receiving individualized special instruction (at home school)	29.1	25.7	60.1	44.5	9.2	28.2	15.3
Gifted pupils receiving individualized special instruction or separate classes in other school or agency	0.1	1.8	0.7	1.1	0.7	0.7	1.1

PERCENTAGE OF GIFTED PUPILS NOT RECEIVING SPECIAL INSTRUCTION IN SCHOOLS WITH SPECIAL INSTRUCTION AVAILABLE AND IN SCHOOLS WITH NO SPECIAL INSTRUCTION AVAILABLE

Classification of Pupils	All U.S. Schools N=1,422,738	Elementary			Secondary		
		Large City N=172,004	Large City Metro Surround N=191,273	Other N=254,601	Large City N=240,877	Large City Metro Surround N=263,051	Other N=269,600
Gifted pupils receiving some special instruction	69.1	64.7	61.7	57.6	90.9	84.3	59.2
Gifted pupils receiving no special instruction: (1) in schools where no pupils receive special instruction	23.2	23.7	34.1	37.5	4.2	11.4	24.0
(2) in schools where some pupils receive specialized instruction but they do not	7.7	11.5	4.2	5.0	4.4	4.3	16.8
Total gifted pupils receiving no special instruction	30.9	35.3	38.3	42.4	9.1	15.7	40.8

PUPIL/STAFF RATIOS FOR MENTALLY GIFTED PUPILS RECEIVING SPECIAL INSTRUCTION

Type of Special Instruction	All U.S. Schools	Elementary			Secondary		
		Large City	Large City Metro Surround	Other	Large City	Large City Metro Surround	Other
Individualized special instruction from specialized personnel/specialized personnel providing instruction	17:1	5:1	15:1	22:1	17:1	33:1	10:1
Individualized special instruction from regular teacher/regular teachers providing instruction	4:1	4:1	3:1	4:1	6:1	5:1	4:1
Instruction in separate classes from full-time or part-time/full-time equivalence of professional staff instructing these classes	41:1	24:1	40:1	47:1	42:1	49:1	48:1
Instruction in separate classes full-time or part-time/total number of professional staff members instructing these classes on a full-time or part-time basis	15:1	16:1	12:1	20:1	15:1	17:1	14:1

REGIONAL FINDINGS

4.10 Selected items from the School Staffing Survey data are presented in a regional breakdown according to the 10 HEW regional classifications. A list of the states in each region is given first. The tables included here are given primarily to show how the various U.S. regions stand in identifying the gifted and how each region provides educational training for the gifted. (Breakdowns into secondary and elementary level schools and large city, large city metropolital surrounding, and other areas are not given because the number of cases in each cell would be too small in some regions.)

REGIONAL BREAKDOWN: IDENTIFICATION OF AND SPECIAL EDUCATION PROVISIONS FOR GIFTED

COMPOSITION OF HEW REGIONS BY STATE

Region 1

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Region 2

New Jersey
New York
Puerto Rico
Virgin Islands

Region 3

Delaware
District of Columbia
Maryland
Pennsylvania
Virginia
West Virginia

Region 4

Alabama
Florida
Georgia
Kentucky
Mississippi
North Carolina
South Carolina
Tennessee

Region 5

Illinois
Indiana
Michigan
Minnesota
Ohio
Wisconsin

Region 6

Arkansas
Louisiana
New Mexico
Oklahoma
Texas

Region 7

Iowa
Kansas
Missouri
Nebraska

Region 8

Colorado
Montana
North Dakota
South Dakota
Utah
Wyoming

Region 9

Arizona
California
Hawaii
Nevada

Region 10

Alaska
Idaho
Oregon
Washington

PERCENTAGE OF TOTAL ENROLLMENT IN ALL SCHOOLS REPORTED AS GIFTED AND PERCENTAGE OF TOTAL ENROLLMENT RECEIVING SPECIALIZED INSTRUCTION FOR GIFTED BY REGION

Region	Total No. Enrolled, All Schools	% Reported as Gifted	% Receiving Specialized Instruction
1	2,862,588	2.52	2.12
2	5,438,626	4.05	3.21
3	4,992,697	2.36	1.81
4	7,246,561	2.77	1.62
5	8,213,159	2.51	1.74
6	5,459,484	3.16	1.85
7	3,141,705	2.88	1.70
8	1,210,934	2.76	1.70
9	4,964,158	5.22	4.03
10	1,571,682	3.21	1.43

PERCENTAGE OF SCHOOLS REPORTING NO GIFTED BY REGION

Region	Total Number of Schools	% Schools Reporting No Gifted
1	6,807	70.84
2	7,303	55.84
3	8,987	71.86
4	12,604	58.14
5	14,449	60.96
6	10,958	56.85
7	6,008	58.97
8	2,706	75.79
9	7,512	21.67
10	3,683	44.04

PERCENTAGE OF GIFTED PUPILS REPORTED AS RECEIVING SPECIALIZED INSTRUCTION OR ASSISTANCE BY REGION

Region	Total Number of Gifted Reported	% of Gifted Receiving Special Instruction
1	72,016	84.35
2	220,106	79.31
3	117,879	76.58
4	200,537	58.41
5	206,160	69.22
6	172,534	58.47
7	90,426	59.00
8	33,362	61.76
9	259,199	77.23
10	50,519	44.39

PERCENTAGE OF GIFTED PUPILS RECEIVING SOME OR ALL OF THEIR INSTRUCTION IN SEPARATE CLASSES, BY REGION

Region	Total No. of Gifted Reported	Subtotal, %		% of Gifted in Separate Classes
		Some	All	
1	72,016	15.18	31.81	28.99
2	220,106	42.36	31.74	74.10
3	117,879	28.34	27.93	56.27
4	200,537	37.33	6.30	43.63
5	206,160	31.63	9.41	41.04
6	172,534	36.96	4.18	41.14
7	90,426	42.74	7.74	50.48
8	33,362	40.23	0.00	40.23
9	259,199	42.05	5.10	47.15
10	50,519	19.42	11.67	31.09

PERCENTAGE OF GIFTED PUPILS REPORTED AS RECEIVING INDIVIDUALIZED SPECIAL INSTRUCTION IN REGULAR CLASSES FROM REGULAR TEACHERS, BY REGION

Region	Total No. of Gifted Reported	% of Gifted Receiving Special Instruction From Reg. Teachers
1	72,016	56.62
2	220,106	5.89
3	117,879	21.84
4	200,537	16.18
5	206,160	33.82
6	172,534	23.82
7	90,426	14.28
8	33,362	21.54
9	259,199	42.56
10	50,519	25.51

PERCENTAGE OF GIFTED PUPILS REPORTED AS RECEIVING INDIVIDUALIZED SPECIAL INSTRUCTION FROM SPECIALIZED PROFESSIONAL PERSONNEL, BY REGION

Region	Total No. of Gifted Reported	% of Gifted Receiving Special Instruction From Spec Prof Pers
1	72,016	0.11
2	220,106	3.68
3	117,879	1.52
4	200,537	0.64
5	206,160	10.05
6	172,534	1.50
7	90,426	0.72
8	33,362	0.64
9	259,199	4.75
10	50,519	0.11

V. PROJECT TALENT

INTRODUCTION

5.1 In the spring of 1960, a 2-day battery of tests and questionnaires was administered to approximately 450,000 high school students (grades 9-12) in 1,353 public, private, and parochial schools throughout the United States. A stratified random sample of 987 of these schools, whose enrollment represents 51% of the 1960 high school population, was used as the Project TALENT sample. Two follow-up studies of all the students in the original sample were conducted 1 year and 5 years after high school graduation to find out how their vocational and educational intentions matched their actual careers. Some of these data are included in the current analysis.

5.2 The original objectives of Project TALENT were as follows:[1/]

- To survey available talent. Undertake an inventory or census of the potential manpower pool that would provide a sound basis for planning national policies and meeting the country's needs in key professional fields such as science, medicine, and engineering, and in important nonprofessional fields.
- To identify interests, aptitudes, and background factors. Investigate the interrelationships of patterns of aptitudes, preferences, interests, socioeconomic status, and the motivational factors prevailing in our secondary school population.

1/ Flanagan et al, The American High School Student, University of Pittsburgh, 1964, p. I-3.

- To determine effects of lack of interest and motivation. Study the extent to which lack of interest on the part of some of our talented young people tends to deter them from undertaking the further training that might qualify them for careers in highly specialized fields.

- To identify factors affecting vocational choice. Investigate the dynamics of personal decisions and environmental factors that ultimately determine the individual's choice of an occupation or career.

- To identify predictors of creativity and productivity. Study the patterns of aptitude, interest, and motivation that underlie creativity and productivity in several different fields.

- To determine the effectiveness of various types of educational experience. Study the effectiveness of various types of educational experience in producing learning and in developing special talent.

- To study procedures for realizing individual potential. Investigate procedures for assisting each individual to make full use of his potential abilities.

To accomplish these goals, 18 different psychological tests were developed, along with three questionnaires. Three of these tests—reading comprehension, abstract reasoning, and mathematical reasoning—were used to form a composite test of cognitive functioning.[2/] From this composite test two samples of Project TALENT students, average and gifted, were selected. The average sample consisted of those high school seniors in the 2.5% of the group scoring closest to the mean score for seniors. The gifted sample was made up of all seniors scoring in the top 2.5% of the sample on the test. The analysis in this study is a comparison of these two samples.

5.3 A major objective of this study is to analyze the characteristics that seem to differentiate average and gifted students. Variations in interests, academic achievement, and future plans between students classified as gifted and those classified as average will be analyzed on the basis of the original Project TALENT high school questionnaire.

[2/] It should be noted that this configuration was selected to reduce cultural bias while measuring thinking ability. It has been used here to define "gifted" and "average." Although the 2.5% cutoff point is somewhat arbitrary, the Advocate Survey results indicate that this approach furnishes a useful operational definition. It is expected that its efficiency and validity are within reasonable bounds when compared to individual tests of intelligence.

Data from the follow-up studies will be used primarily to determine

- Education pursued after high school in light of plans made in high school
- Reasons for continuing or discontinuing schooling
- Career progress and job satisfaction.

The data are presented in bar graphs grouped by topic. A brief summary of the findings for each topic precedes each set of graphs. Because of the large sample size, virtually all percentage differences over 1% found in the charts are statistically significant.

HIGH SCHOOL INVENTORY

Family Background

5.4 The gifted and average subsamples from Project TALENT were compared on three socioeconomic status indicators: family income, father's education, and father's occupation. The findings concerning family income (as estimated by students) indicate that gifted students clearly predominate among the wealthier families, while the average students are most often found in families of modest income (below $6,000 per year).

5.5 It was rather surprising to find that a large number of high school seniors could not estimate their family's income. Almost one-third of the average sample and 17% of the gifted sample were unable to provide an estimate. If the bar graph is based on just the students who were able to estimate, the results are even more striking. Over half of the average students were in the $6,000 or less range while almost half (44.1%) of the gifted were in the highest range. It is important to note for the purpose of comparison that the median family income in 1960 was $5,620. This is also the approximate median income of our average sample. For the gifted sample, however, the median family income is near $8,200.

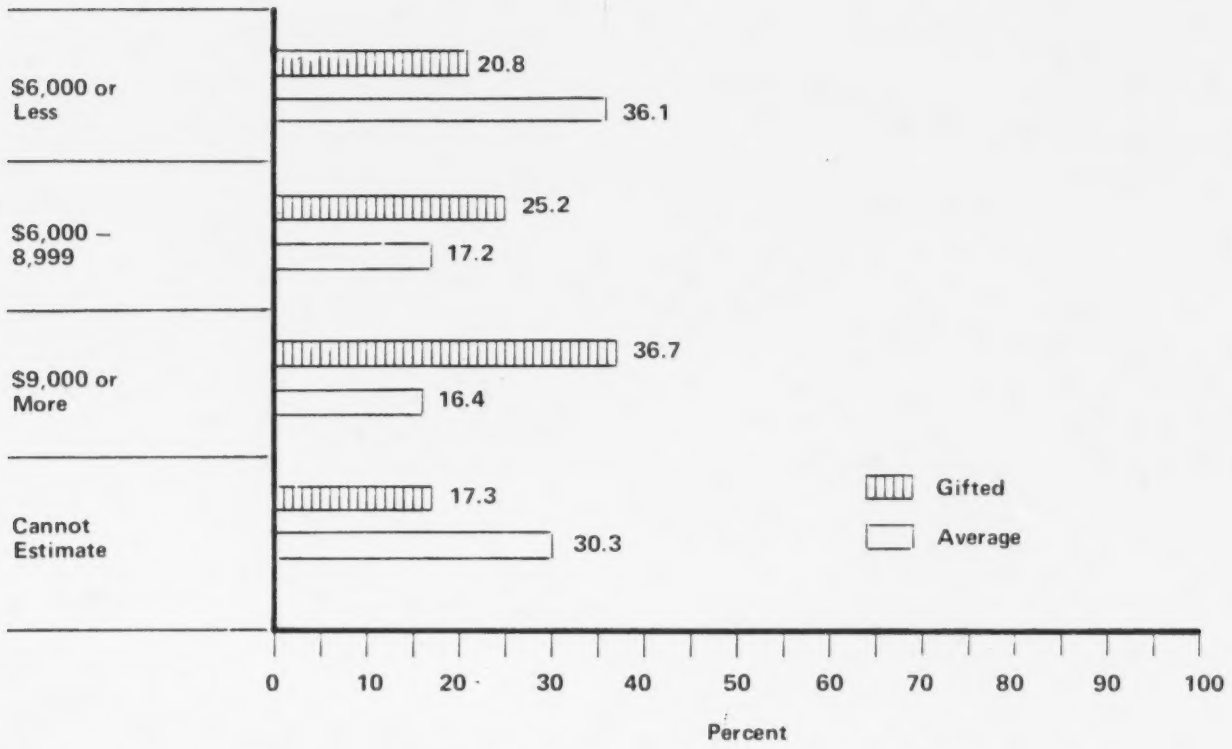
5.6 The data on father's education also support the finding that gifted are more often found at the top of the social scale than at the bottom. In 1960, 60% of the average sample identified their fathers as having completed high school or less. Only 25% of the gifted sample reported that their fathers had not gone beyond high school. At the other end of the scale, 34% of the gifted sample reported that their fathers had a bachelor's or higher degree; only 10% of the average sample reported this. A curious finding is that three times as many gifted as average students (9% versus 3%) said they did not know how much formal education their fathers had.

5.7 The occupations of the fathers of both sample groups further reinforced the general findings on the socioeconomic distribution of the groups. The most frequently mentioned occupation for the fathers in the average sample was clerical worker (19.3%). This category includes bank tellers, sales clerks, bookkeepers, etc. For the gifted sample, the most frequently used classification was "technical"—draftsmen, surveyors, medical technicians, etc. Over 36% of the gifted sample reported that their fathers were managers, professionals, or proprietors, whereas 22% of the average sample used these classifications. One-third of the fathers of the average sample were farmers and private household workers; only 9% of the gifted sample fathers were in these classifications. The two groups were closest in the classifications that probably would be considered near the mean of the nine occupation categories (in terms of amount of experience and education required)—skilled or semiskilled workers, and salesmen. The first of these categories includes such occupations as bus driver, carpenter, electrician, and plumber. The latter group includes real estate or insurance salesmen, factory representatives, etc.

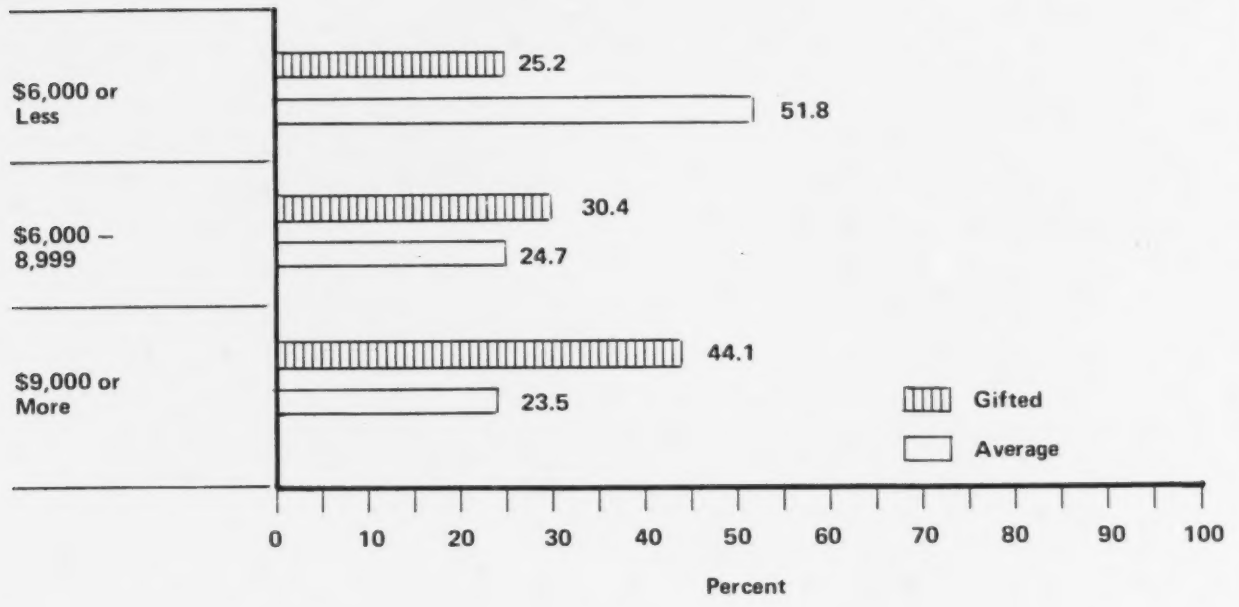
5.8 In summary, the gifted sample was generally clustered near the top of the scale and the average sample was clustered near the bottom on all indexes of socioeconomic status used to identify the family background of the sample groups. It is beyond the scope of this study to attempt to determine whether this phenomenon is a function of the fact that higher income parents know how to develop the intellectual abilities of their children better than "average" parents, or whether it is merely a function of a hidden cultural bias toward the upper end of the socioeconomic scale in the I.Q. measures used. The strong correlations between intelligence and social class generated by this large national sample of students could provide an interesting starting point for further investigation.

RESPONSES CONCERNING FAMILY BACKGROUND

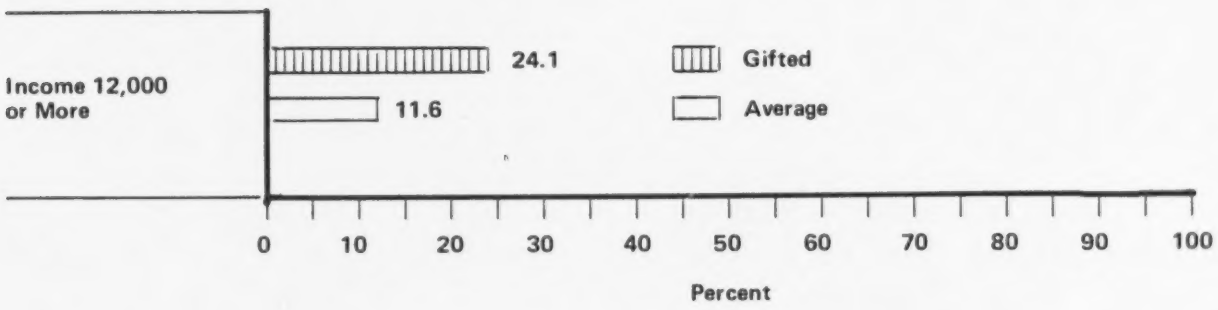
Please make the best estimate you can of your family's total income for last year.



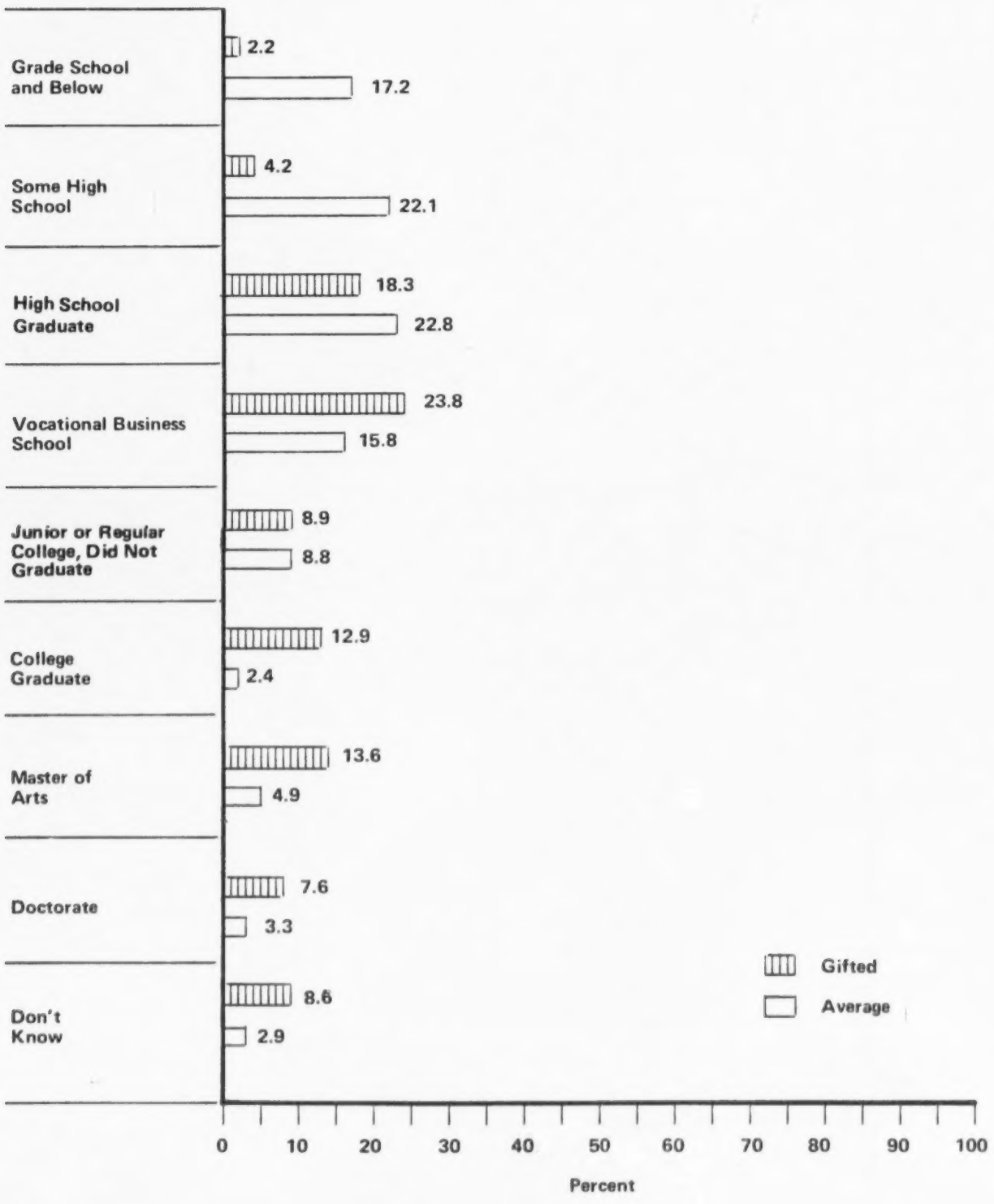
Please make the best estimate you can of your family's total income for last year. (Based only on those answering)



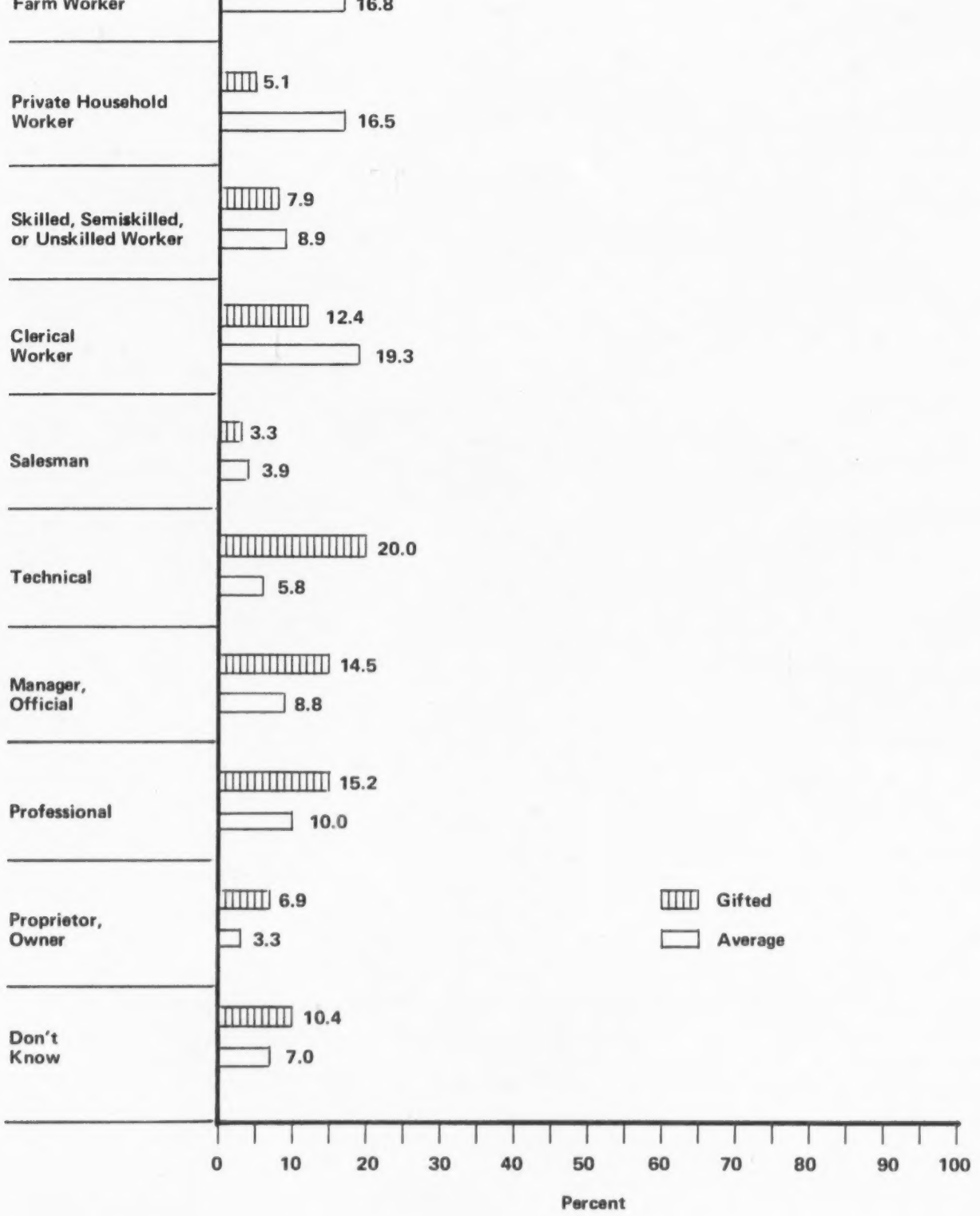
Students whose family income exceeds twice the 1960 median family income—based only on those providing estimates (median family income 1960—$5,620):



Highest level of education
your father has reached:



Which one of the following comes closest to describing the work of your father (or the male head of your household)?



High School Academic Achievement

5.9 The vast majority of students in the gifted sample (92%) were following a college preparatory curriculum in their senior year of high school. This compares with only 31% of the average sample. The 8% of the gifted who were not in a college preparatory curriculum were almost evenly divided between a general curriculum and a commercial or business curriculum. Considering the fact that the gifted sample represents those measured as being the most intelligent 2.5% of the U.S. high school population, the 8% in general courses or typing and shorthand may represent a significant under-utilization of ability.

5.10 Most of the gifted sample seemed to achieve the grades that would be expected of students with their ability. Roughly 80% of the group reported that they consistently received above average or superior grades. A significant subsample of the group, however (15-20%), reported that their grades were somewhat lower than their intelligence would lead one to expect. The number of gifted reporting that they generally get Cs or Ds in any particular subject was relatively low, 5% or less, but the next lowest group, those earning Bs or Cs, can also be assumed to represent a lower than expected level of achievement for these students. Because students were given the option of selecting the category "mostly A and B" to describe their grades, those who selected the "mostly B and C" category were those who work was evaluated as being of average or slightly better than average quality. For the average sample, this "mostly B and C" category would be the expected level of achievement. The actual grades received by this group usually supported this assumption. In terms of overall high school grades, 51% of the average sample reported themselves as being in the "mostly B and C" grade category. Also, however, 20% of the gifted sample reported their overall 3-year grade average as being "mostly B and C" or lower. This figure, which indicates that one in every five of the most intellectually talented high school students was performing at no more than an average level, seems to indicate a problem in motivating a substantial segment of the gifted school population.

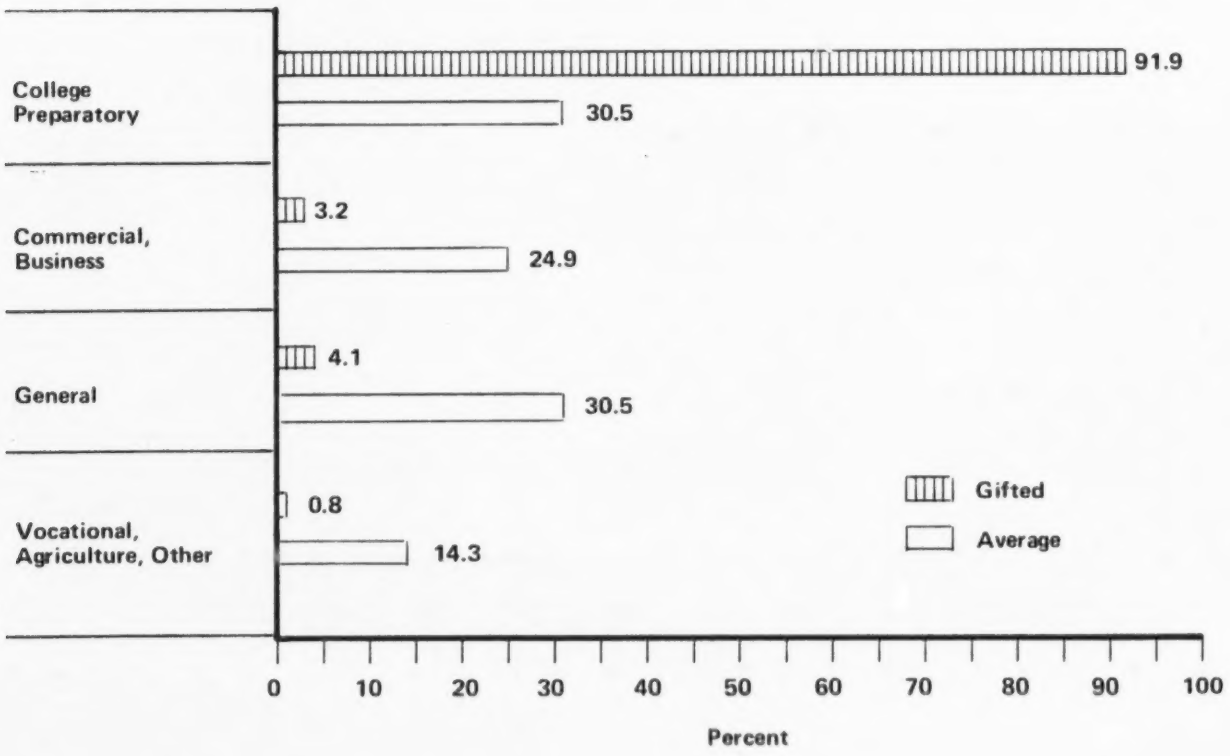
5.11 The breakdown of grades by subject area generally indicated a slightly lower incidence of average or below average grades among the gifted than that reported for their 3-year overall average. The number of gifted who reported receiving average or below average grades by subject area were:

Science	15%
History, social science	16%
Mathematics	17%
English	19%
Foreign languages	29%

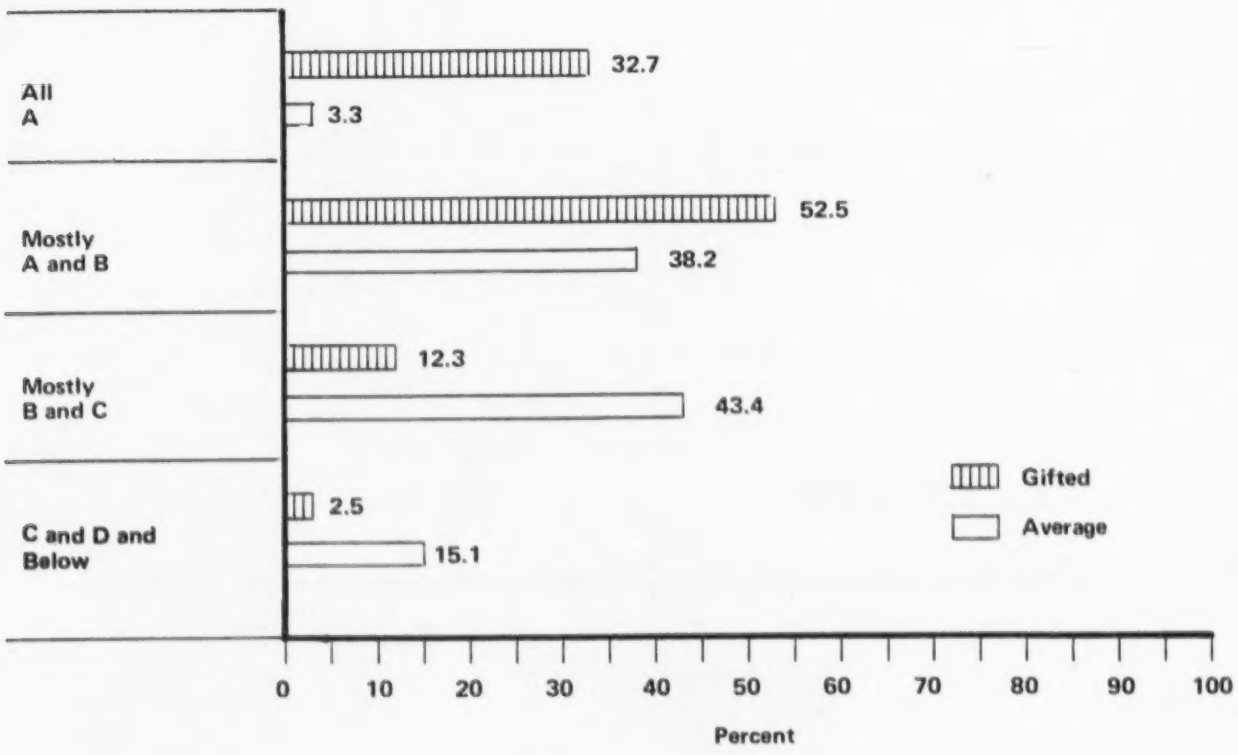
The foreign language area was notable in that more of the average sample reported all As in this than in any other area, and many more of the gifted reported low grades in this area than reported low grades in any other. This might indicate the need to take a close look at methods used in teaching foreign languages in the early 1960s, many of which are still in use. Learning by rote memorization in place of dynamic language usage would tend to enhance the average child's performance and hinder the gifted child. This curriculum probably should be given special attention in any program geared to the education of the gifted child.

RESPONSES CONCERNING ACADEMIC ACHIEVEMENT

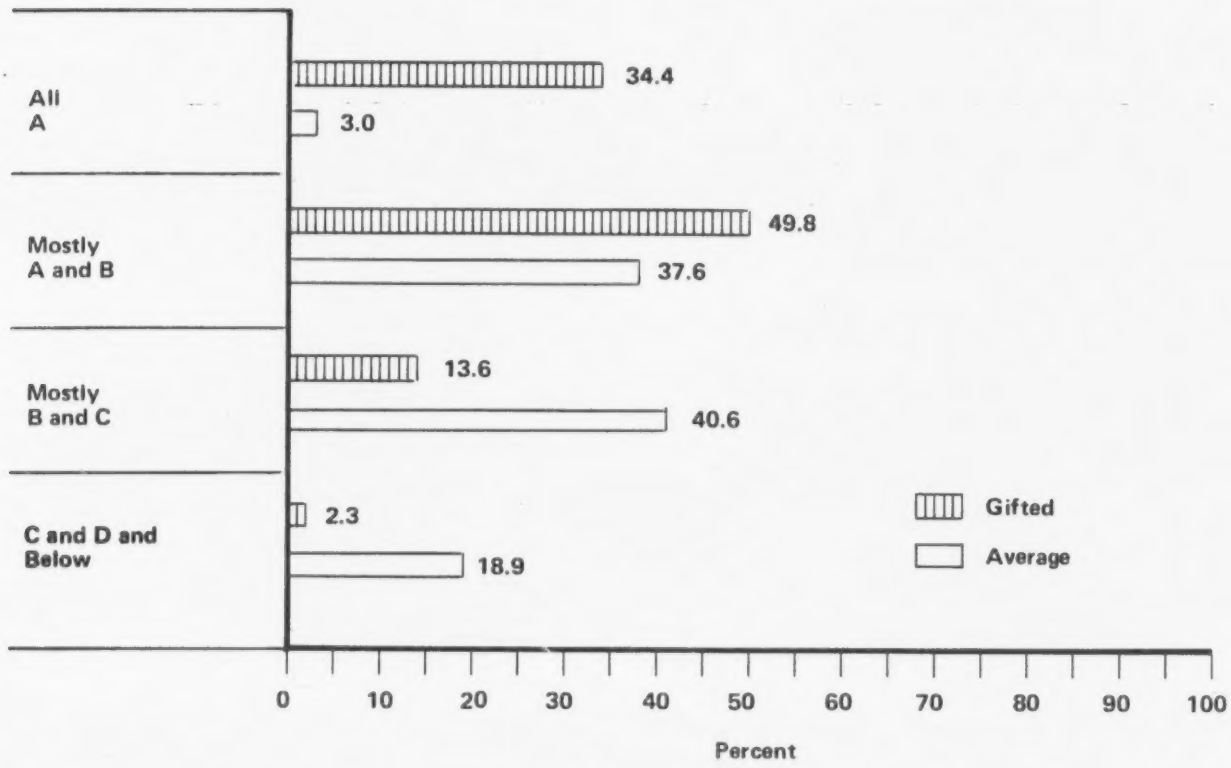
Which one of the following high school programs or curricula is most like the one that you are taking?



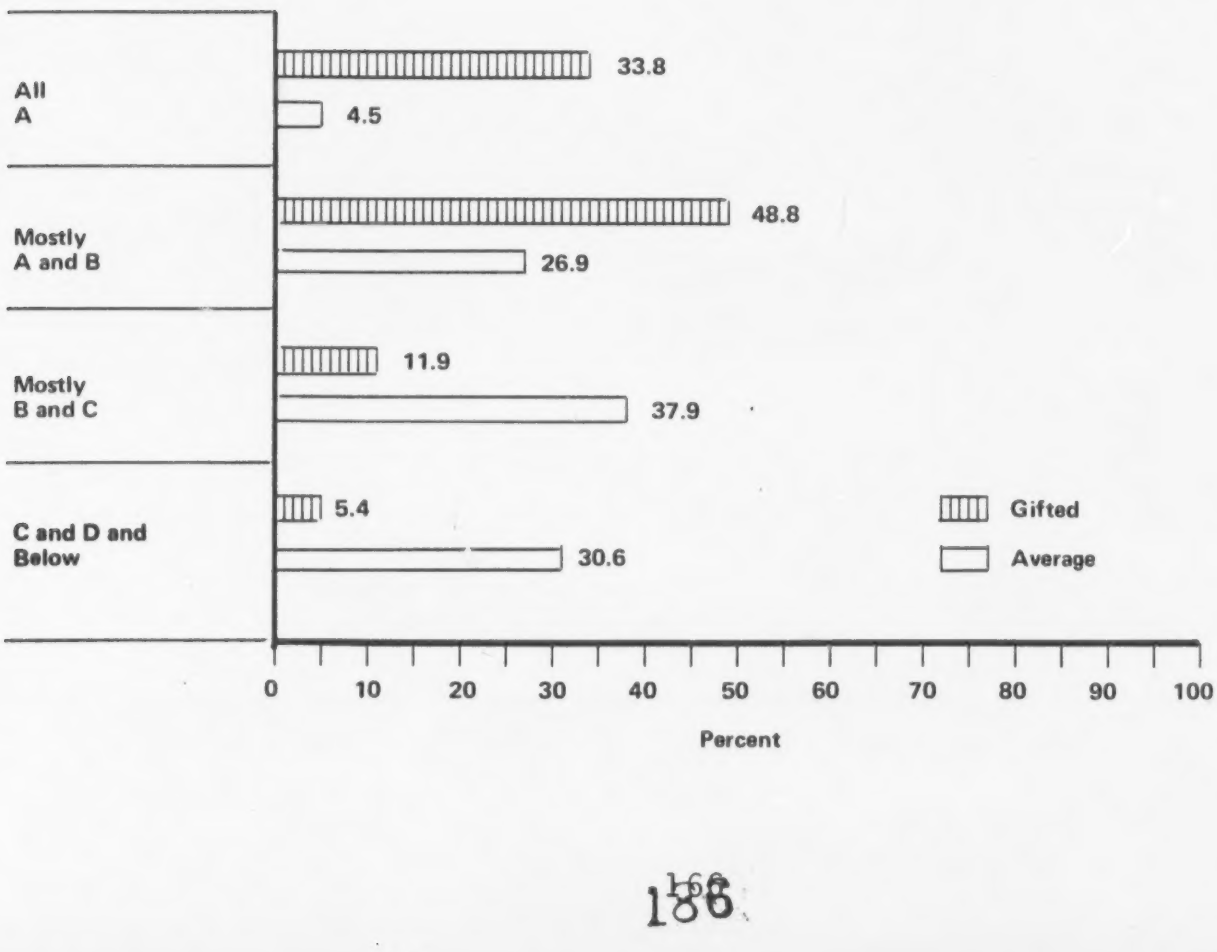
My grades in science courses have been:



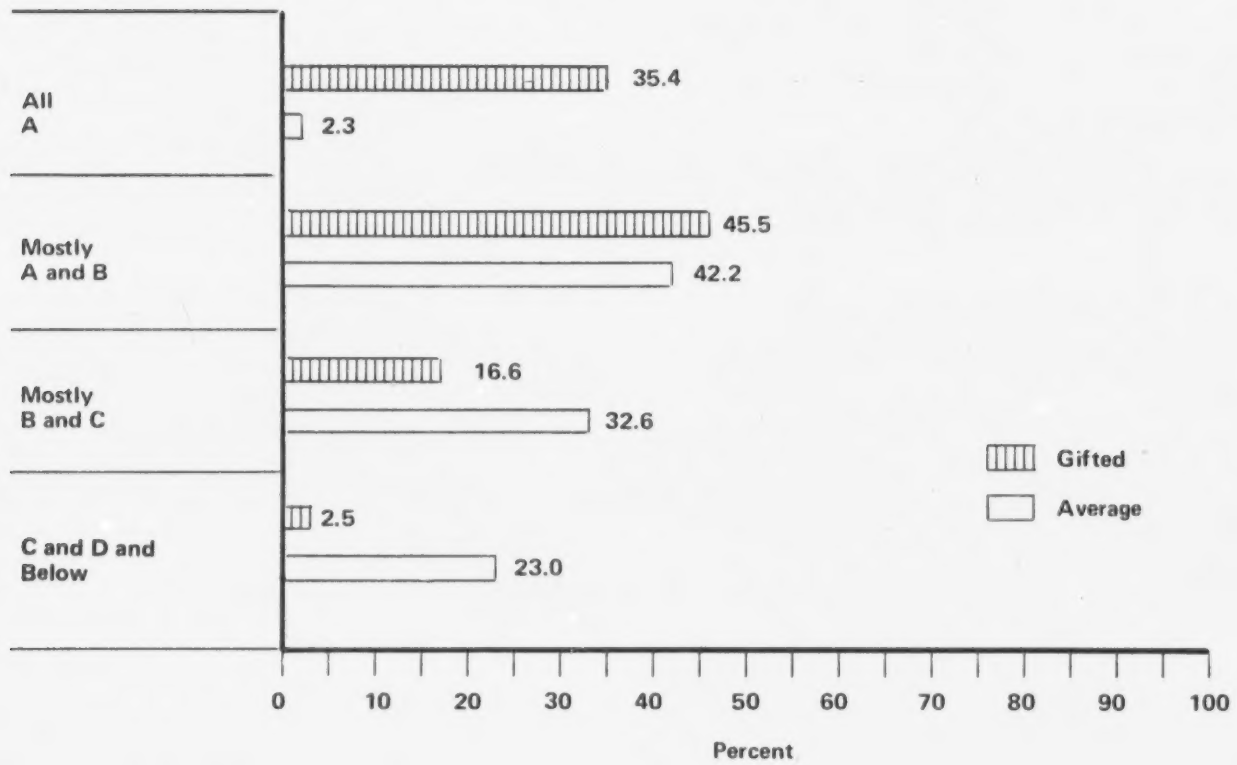
My grades in history and social studies have been:



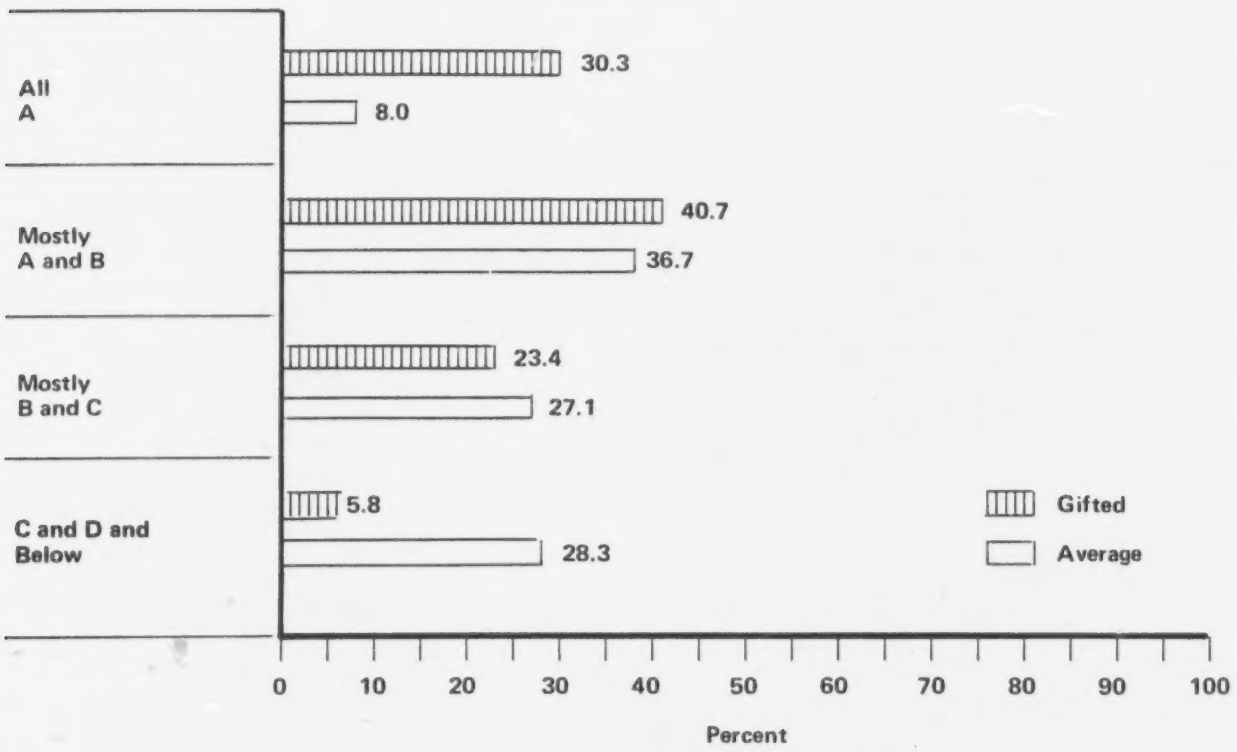
My grades in mathematics have been:

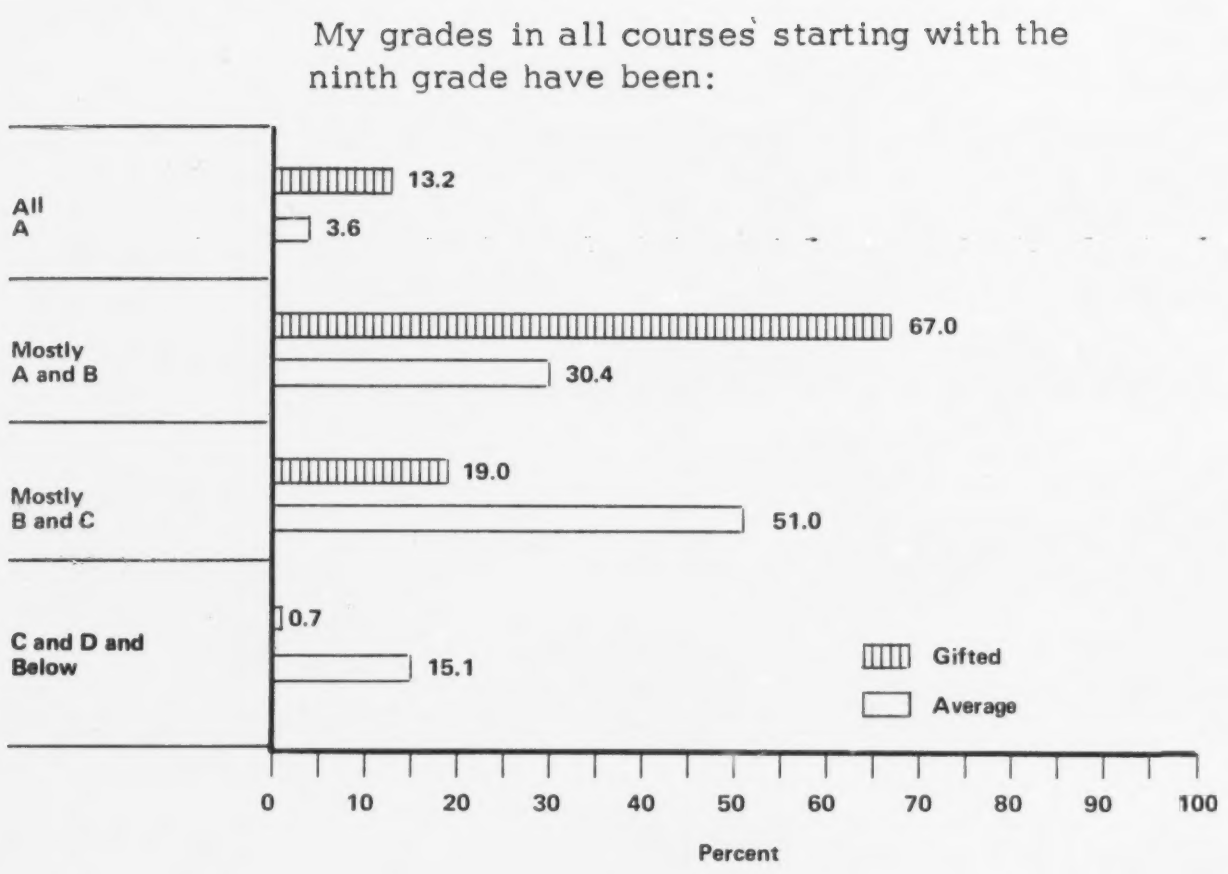


My grades in English courses have been:



My grades in foreign languages have been:




My grades in all courses starting with the ninth grade have been:
All A
13.2
3.6
Mostly A and B
67.0
30.4
Mostly B and C
19.0
51.0
C and D and Below
0.7
15.1
Gifted
Average
0
10
20
30
40
50
60
70
80
90
100
Percent

Attitude Toward School

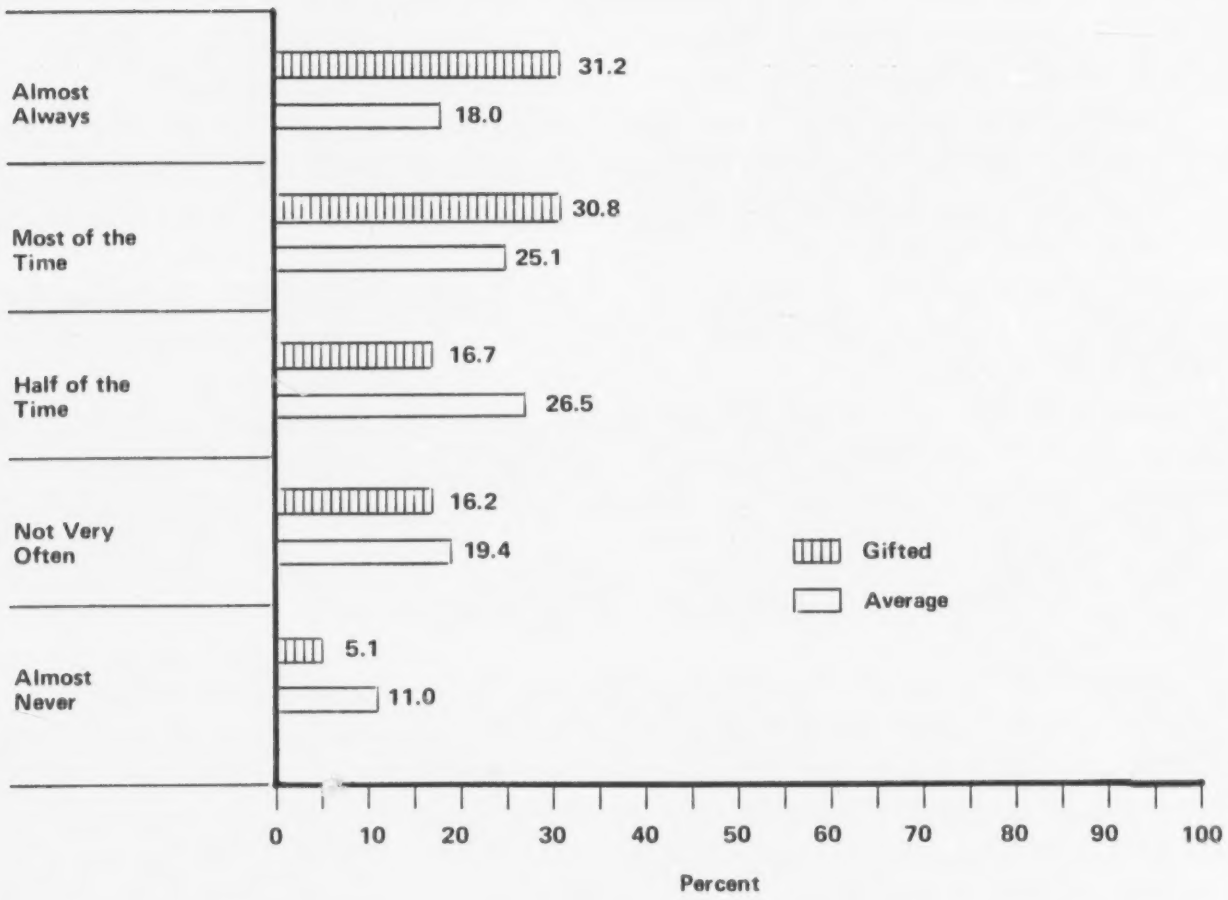
5.12 Attitude toward school was roughly measured by an item in the student information blank that asked the students to indicate how often a situation applied to them. In this item the average sample was more likely than the gifted sample to express what probably would be classified as a negative attitude. The number of gifted students expressing a "negative" attitude, however, was far from negligible.

5.13 The statement presented to the students was: "My grades reflect my ability fairly accurately." Although the majority of the gifted sample (62%) said that this statement was applicable to them most of the time or almost all the time, the remaining 38% said that at least half of the time their grades did not reflect their ability. The number of average students who thought that their grades usually did not reflect their ability was larger (57%), but the high number of gifted students who were in this group indicates that in their own minds many students believed they were not earning the grades they were capable of earning.

5.14 The 38% of the gifted sample mentioned in the above paragraph refers to students who said they thought the statement did not apply to them half of the time at least. The number who disagreed with the statement occasionally or only because of a particular course or teacher are not included in these statistics.

RESPONSES REFLECTING ATTITUDE TOWARD SCHOOL

My grades reflect my ability fairly accurately.



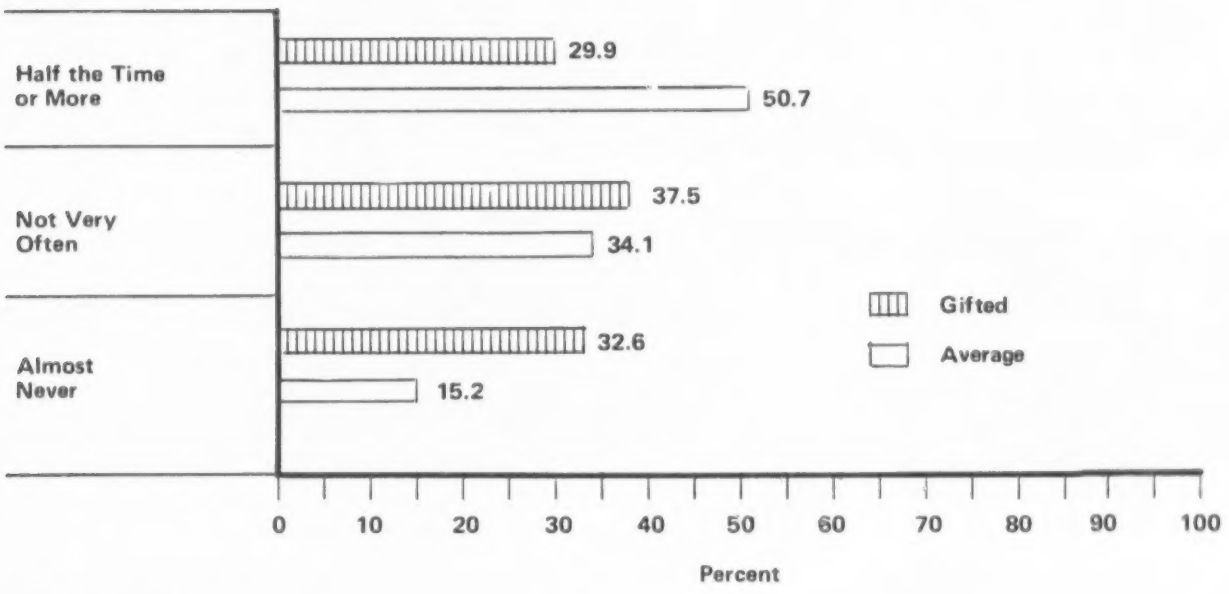
Academic Motivation

5.15 Three items in the high school inventory were used to measure academic motivation within the two sample groups. On all three of these items, the gifted sample showed a higher incidence of academically motivated students than the average sample. In the gifted sample, however, close to one-third of the students reported considerable difficulty in maintaining an interest in their courses; 30% said that "Lack of interest in my school work makes it difficult for me to keep my attention on what I am doing." Although this figure is significantly lower than the 51% of the average sample who said they had the same feeling at least half of the time, it is still quite an indictment of the educational system provided for these students. The second statement was: "I feel that I am taking courses that will not help me much in an occupation after I leave school." In response to this item, 40% of the average students and 23% of the gifted students said that the statement applied to them at least half of the time. Again, the support for the statement was less in the gifted sample, but nevertheless, represented almost one student in four.

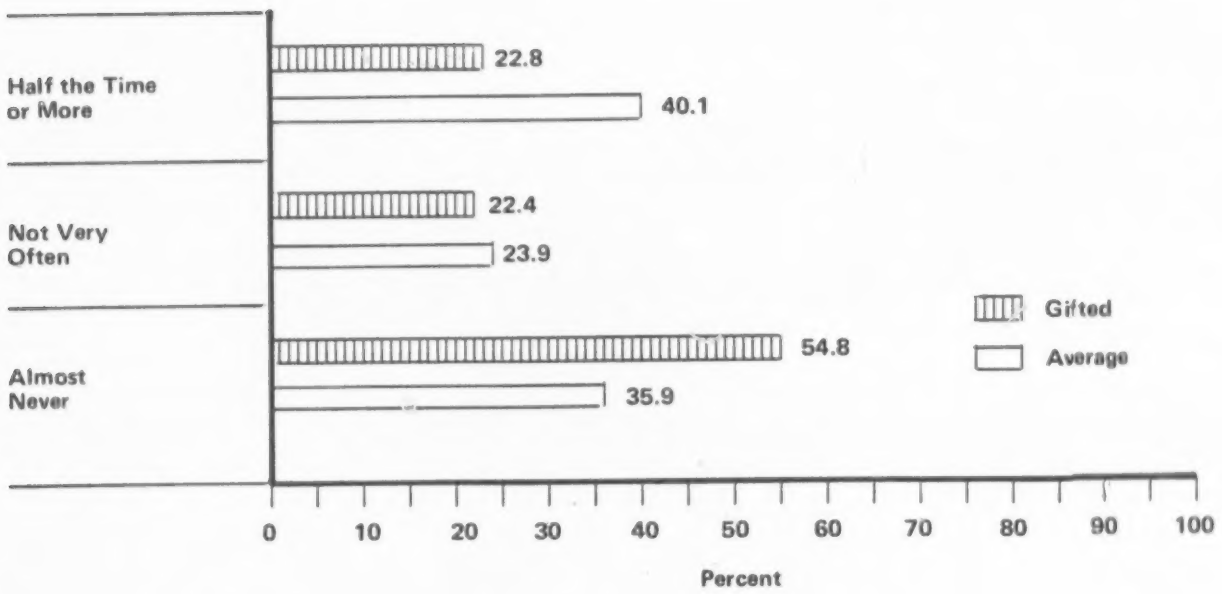
5.16 The third statement, "Unless I really like a course I do only enough to get by" reflected a similar amount of under-productivity. Over one-third of the gifted sample (36%) said that this is their reaction half of the time or more. In light of the relatively high degree of apathy toward class work and the occasional finding that the course will serve no useful purpose after graduation, the low motivation of a significant portion of the gifted sample is to be expected. These three items together show that, at least in 1960, roughly 30% of the highly intelligent students were seriously dissatisified with the education they were receiving, but despite the strikingly high percentages of low motivation responses by both samples, the gifted students appear to be significantly more highly motivated than the average. Although longitudinal analysis of subgroups within our two samples is beyond the scope of the present study, a cross tabulation of the academically unmotivated gifted with the occupational categories in the 5-year follow-up could be run to show what effect, if any, low academic motivation in high school has on the career choices of young people.

RESPONSES CONCERNING ACADEMIC MOTIVATION

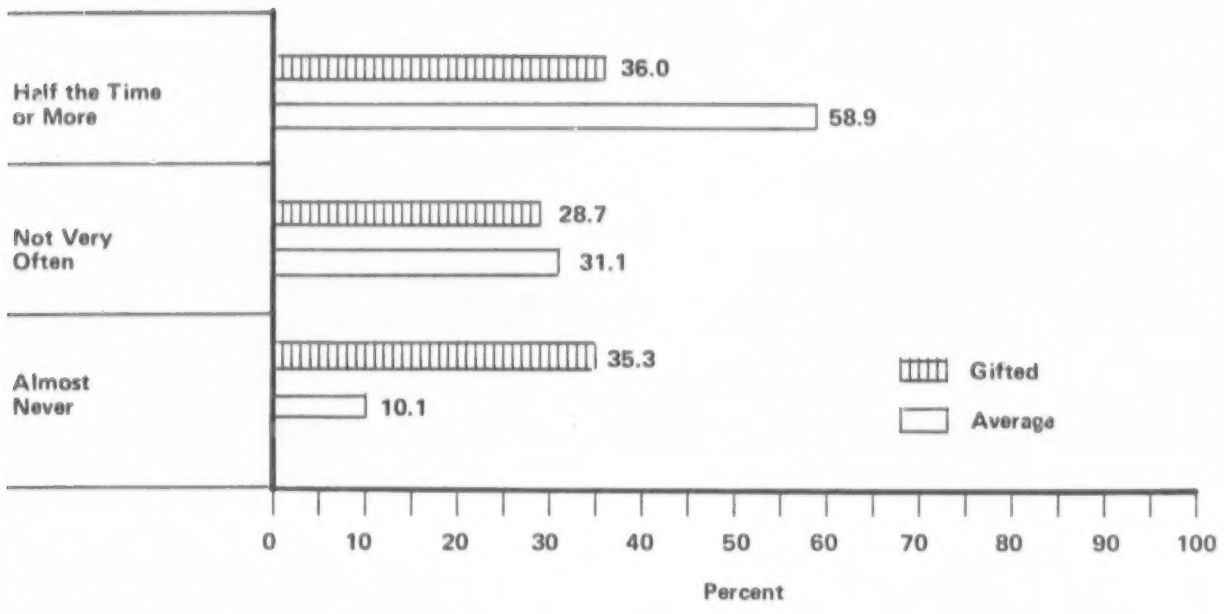
Lack of interest in my school work makes it difficult for me to keep my attention on what I am doing.



I feel that I am taking courses that will not help me much in an occupation after I leave school.



Unless I really like a course, I do only enough to get by.



High School Activities

5.17 On all the various measures of participation in group activities and organizations used in the high school inventory, the gifted sample showed a consistently higher degree of participation than the average sample. Not only were the gifted more active in intellectual pursuits, surprisingly enough they were more active in athletics as well. This would tend to support the findings of Terman, Witty, and others.3/

5.18 Less than 1% of the gifted said they did not join any clubs in high school. This compares to 19% of the average sample. On the other end of the scale, 25% of the gifted reported that they were members of seven or more clubs and organizations. Only 9% of the average sample indicated such a high number of club memberships. Two-thirds of the gifted reported membership in at least four clubs while less than 40% of the average sample reported as many memberships.

5.19 Of course, a long list of memberships in organizations does not necessarily reflect an active participation in any of them. To get an idea of how much the students actually participated in organizations and how wide the range of these organizations was, the students were asked to rate how actively they participated in each of 10 types of clubs or other extracurricular activities. These 10 classifixations covered a wide range of organizations from political clubs to religious youth groups and the school newspaper. Only 5% of the gifted sample said they were not active in any of the 10 types of clubs listed. This compares with 19% of the average sample. Twice as many gifted as average were represented at the other extreme, active in five or more types of organizations (15% versus 8%).

5.20 As was mentioned above, the gifted students also were more active in sports than their counterparts in the average sample. Despite the fact that almost half of both samples was female, 67% of the gifted and 62% of the average group were members of at least one athletic team at some time during high school. For the most part the percentages for membership in a specified number of teams were the same for both groups. The only exception was the highest level of participation, eight or more team memberships; 14% of the gifted and 10% of the average were in this category.

5.21 The gifted also were more frequently elected to leadership positions in organizations in which they participated. The majority of the gifted sample served as president of one or more organizations; 16% had been elected twice and 15% three or more times. Only about one-third of the average sample had

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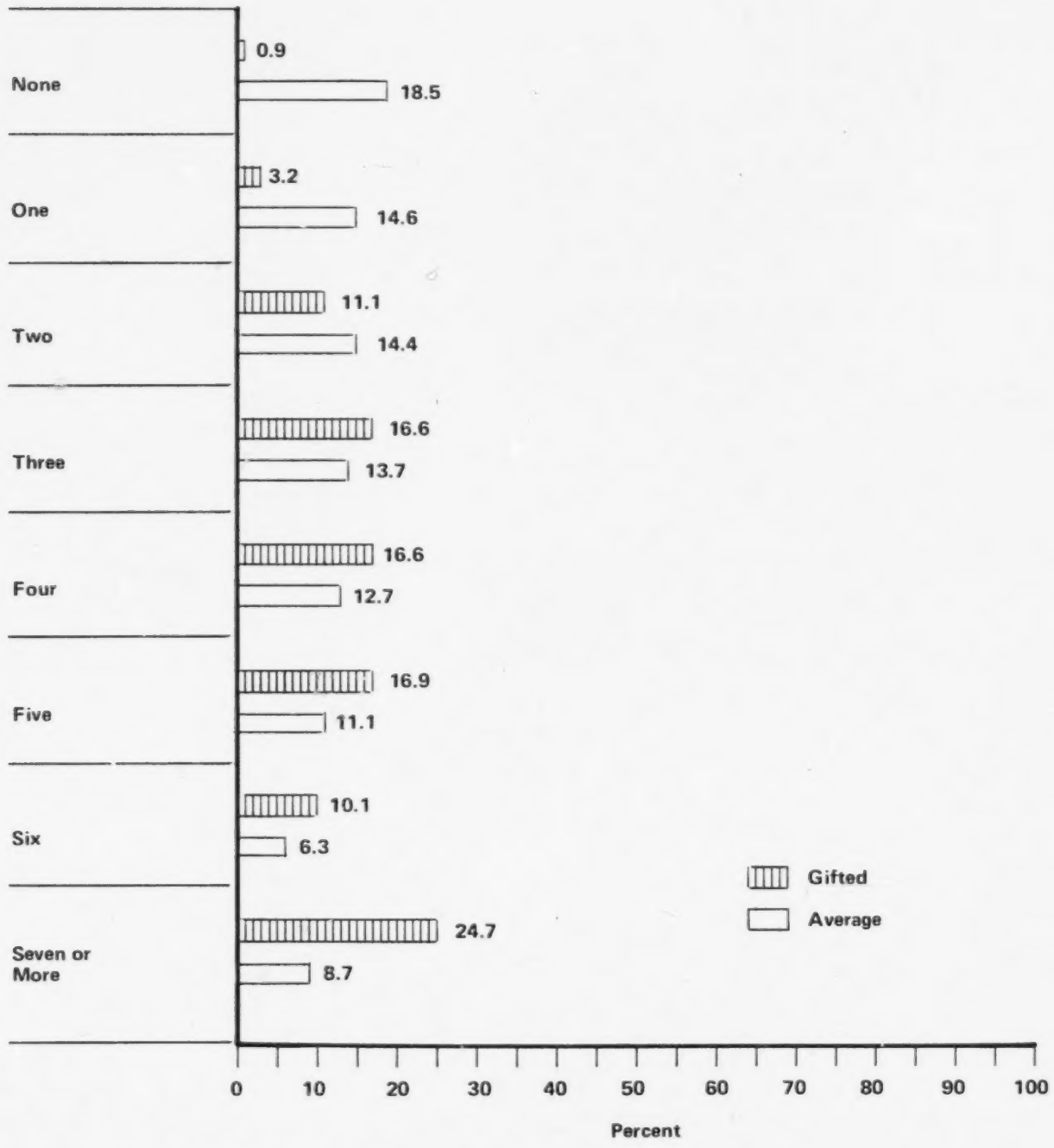
3/ L.M. Terman and M. Oden, "The Gifted Grows Up," Genetic Studies of Genius, Vol. IV, Stanford University Press, 1952; P. Witty and E. Grotburg, Educating the Gifted, Science Research Associates, 1970.

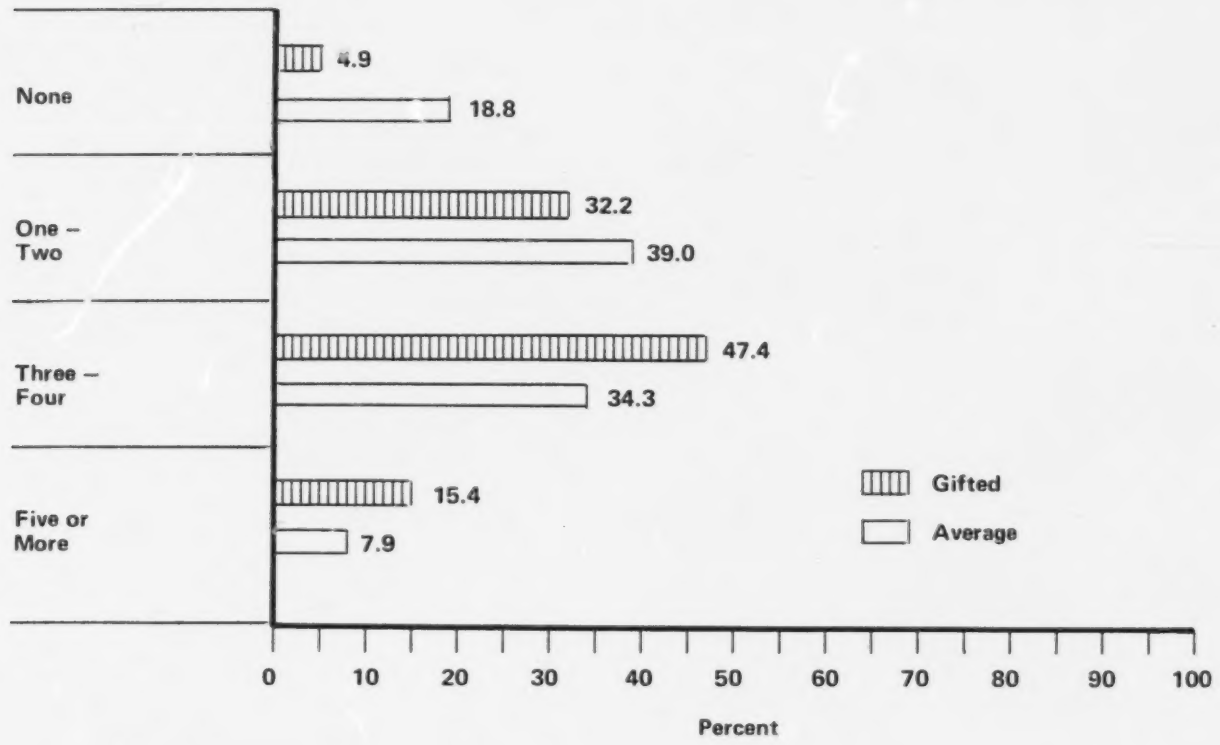
held the office of president, with 8% elected twice and 13% elected three or more times. The gifted also served more frequently as other officers and committee chairmen in their organizations. Only 15% of the gifted had never served as a class or club officer. In the average sample this figure was 42%. If a gifted student served as an officer once, the chances were very good that he would serve many more times. One-fourth of the gifted held office five or more times. (These last figures represent responsibilities in addition to and separate from the previous statistics on presidencies of organizations.)

RESPONSES CONCERNING ACTIVITIES

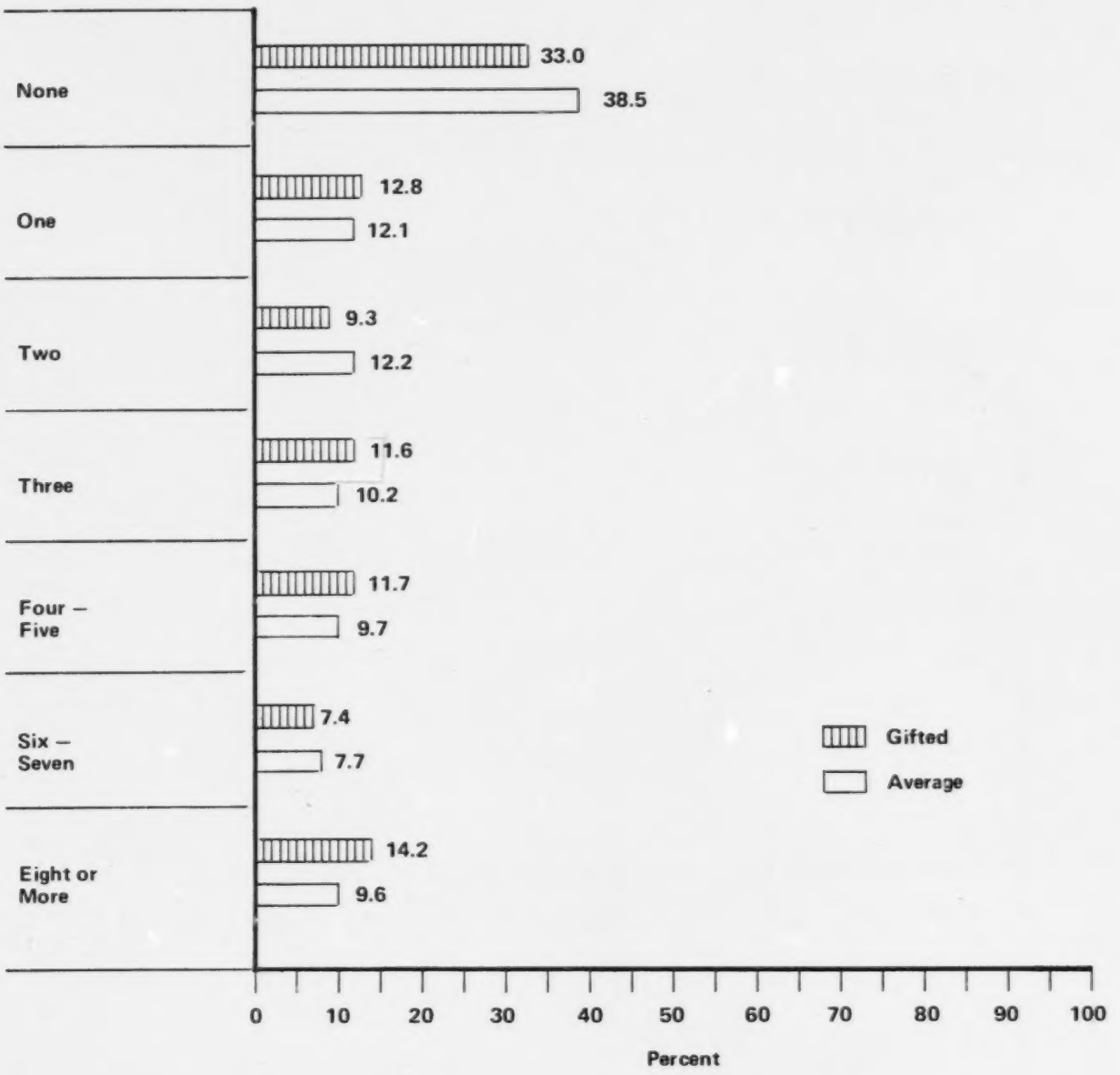
How many clubs or organizations (other than athletic) have you belonged to in the last 3 years?



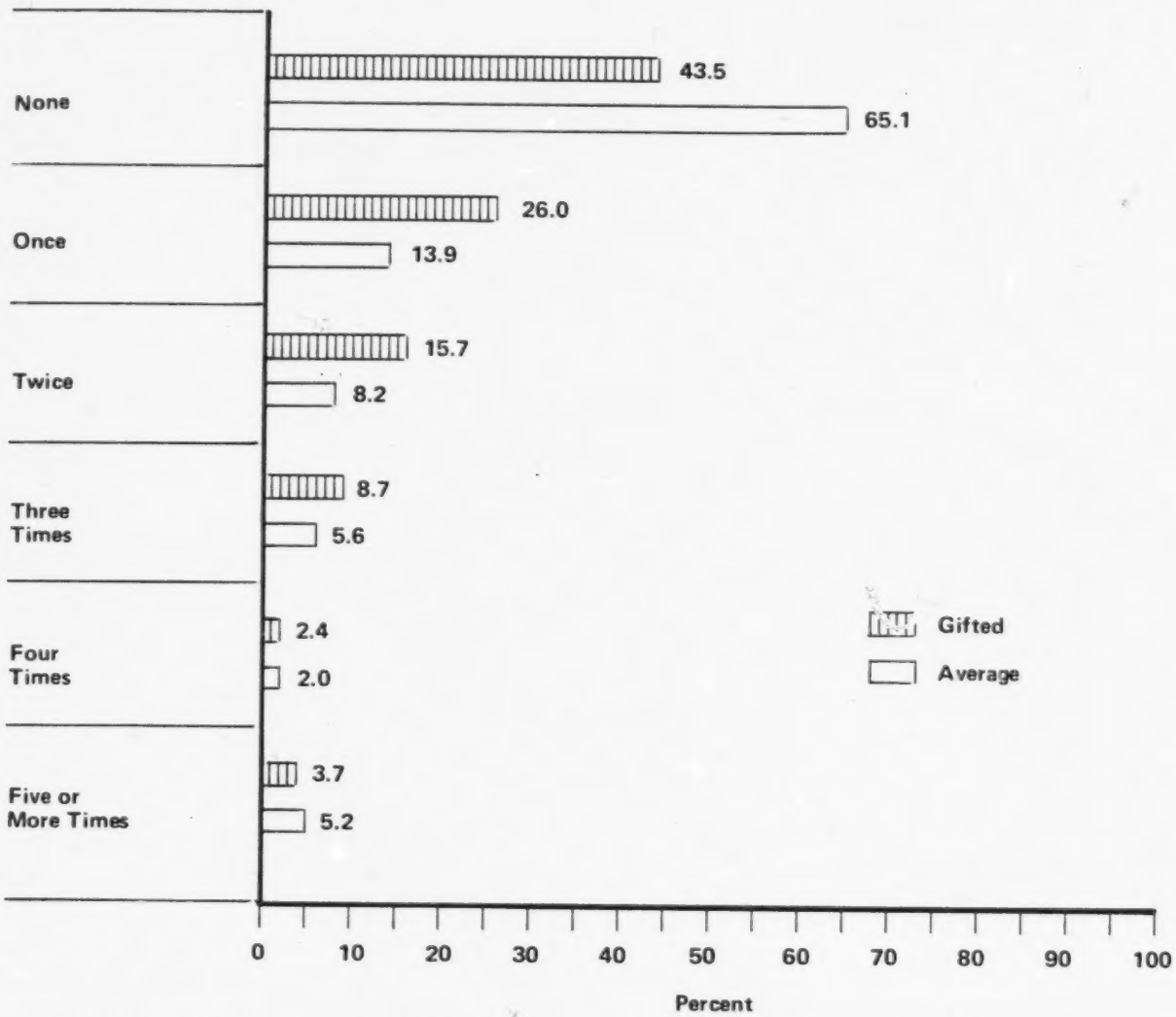
In how many of the types of organizations and extracurricular clubs listed here have you been active (not just a member)? (List included 10 broad types of organizations such as journalism, hobby clubs, debate, religious groups, etc.)



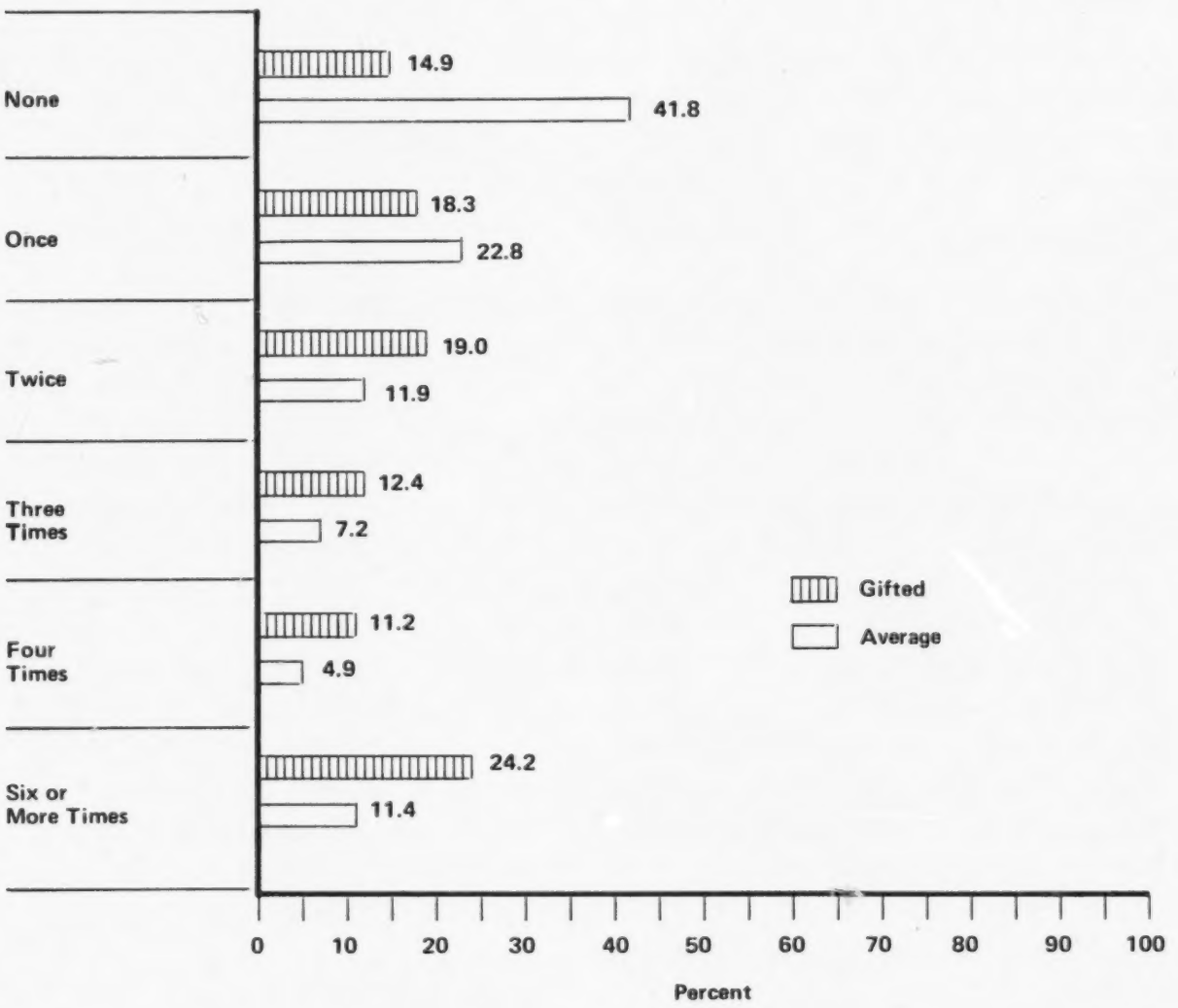
How many athletic teams have you been a member of in the last 3 years?



How many times have you been president of a club or other organization (other than athletic) in the last 3 years?



How many times have you been a committee chairman or an officer (other than president) of a class, club, or other organization (other than athletic) in the last 3 years?



Recreation

5.22 As one would expect, the gifted attended cultural activities such as plays and concerts much more frequently than the average sample. While 25% of the average sample said they had not attended such activities more than once in the past 3 years, only 4% of the gifted had not attended at least two such activities.

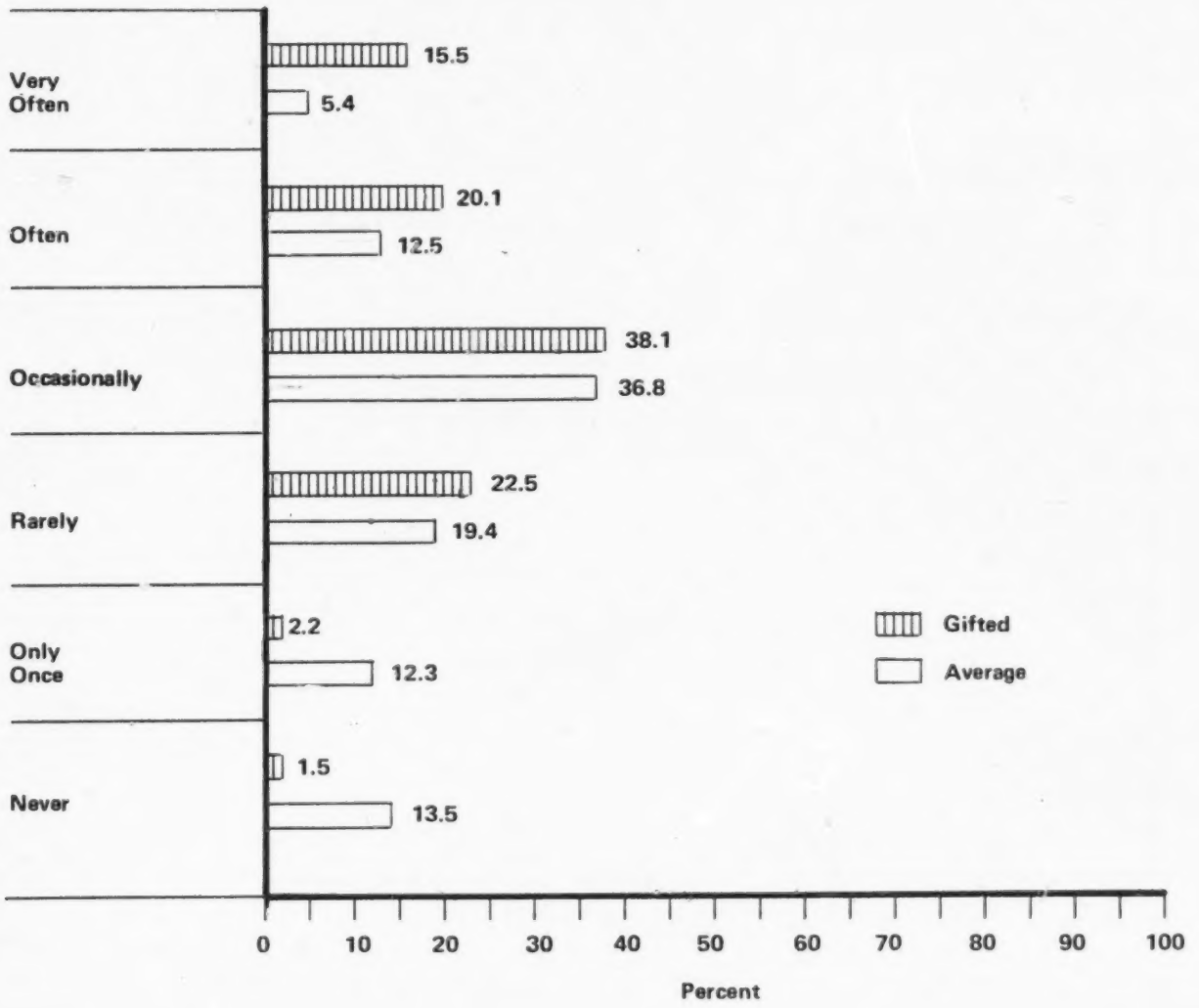
5.23 When asked how often they went swimming or played golf or tennis, 72% of the gifted and 57% of the average replied "very often" or "often." This is another indication of the extent to which almost all of the gifted in the sample seemed to be motivated to participate in a wide variety of activities.

Financial Independence

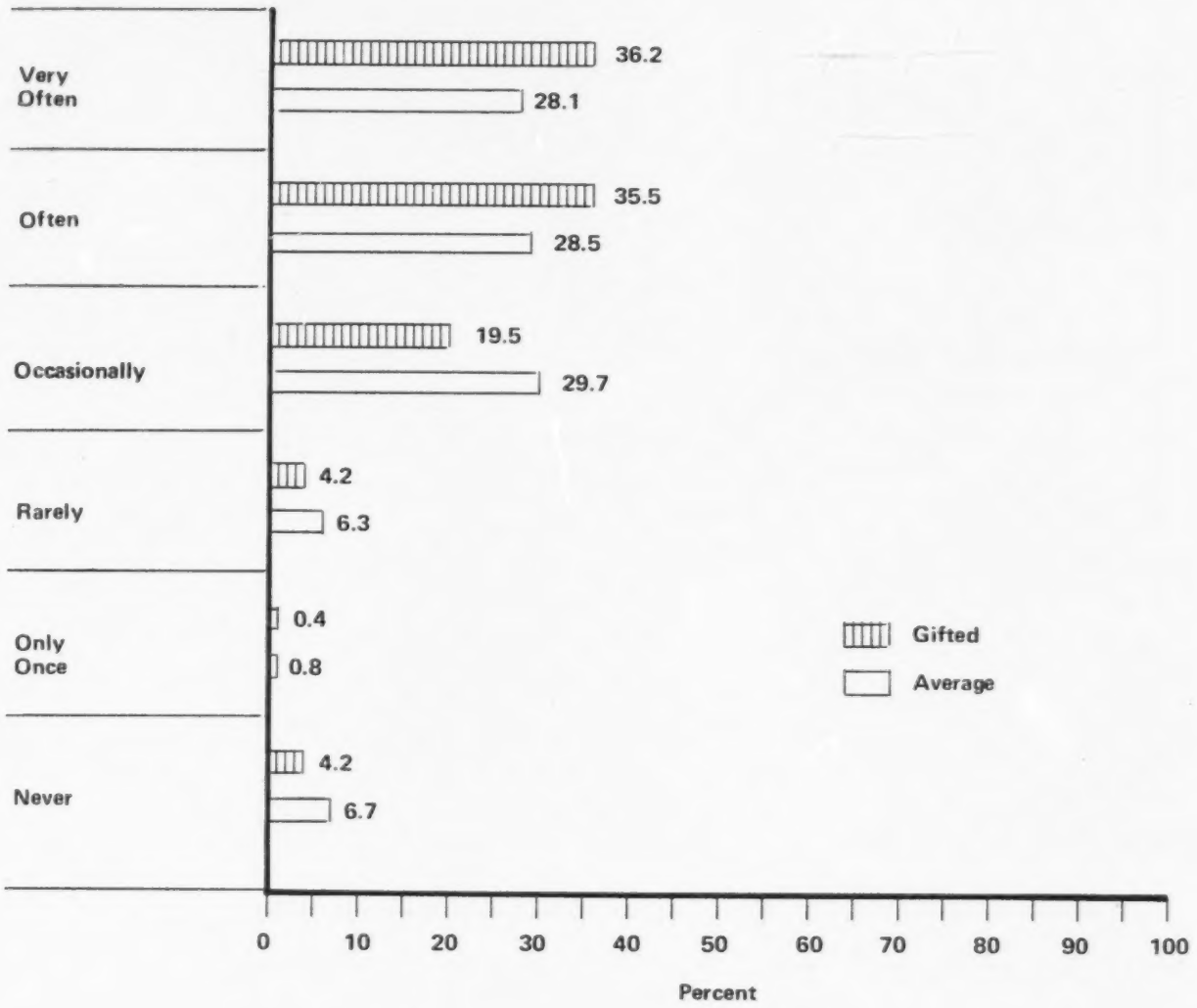
5.24 To determine how financially dependent on their families the sample groups were, the students were asked to estimate how much of their spending money was derived from a job and how much came from their families. The differences between the two groups were not extreme, but the average group did appear to be slightly more financially self-sufficient than the gifted. This is not surprising, especially in light of the generally lower family income of the average students, which would tend to indicate a greater need for these students to earn their own spending money. Slightly more gifted than average students (32% versus 29%) did not earn any money from outside jobs. At the other end of the scale, twice as many average as gifted (27% versus 13%) earned all of their spending money in outside jobs. Less than half of both samples received regular allowances from their parents. Only 26% of the gifted and 20% of the average sample received allowances that accounted for more than half of their spending money. More often, the family just provided money on a supplementary basis when it was needed. If the family was providing money as needed, this amount in most cases was less than half of the student's total spending money.

RESPONSES CONCERNING RECREATION AND FINANCIAL INDEPENDENCE

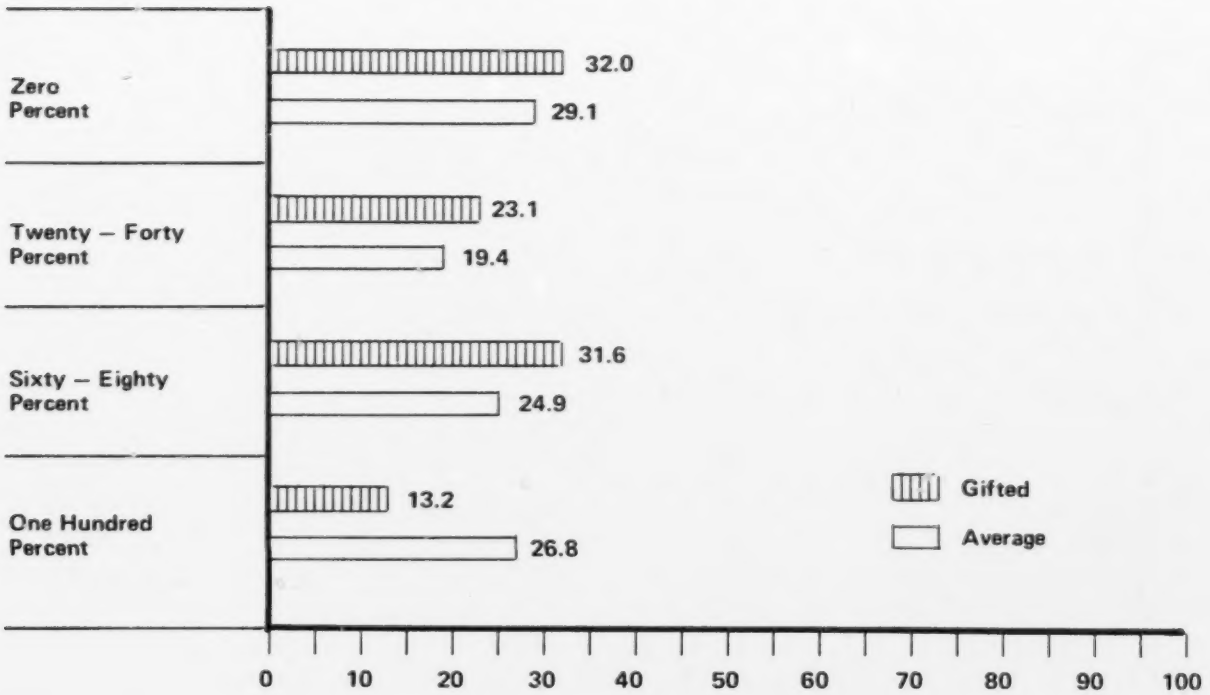
How often in the past 3 years have you attended concerts, lectures, ballets, plays, visited art galleries or museums?



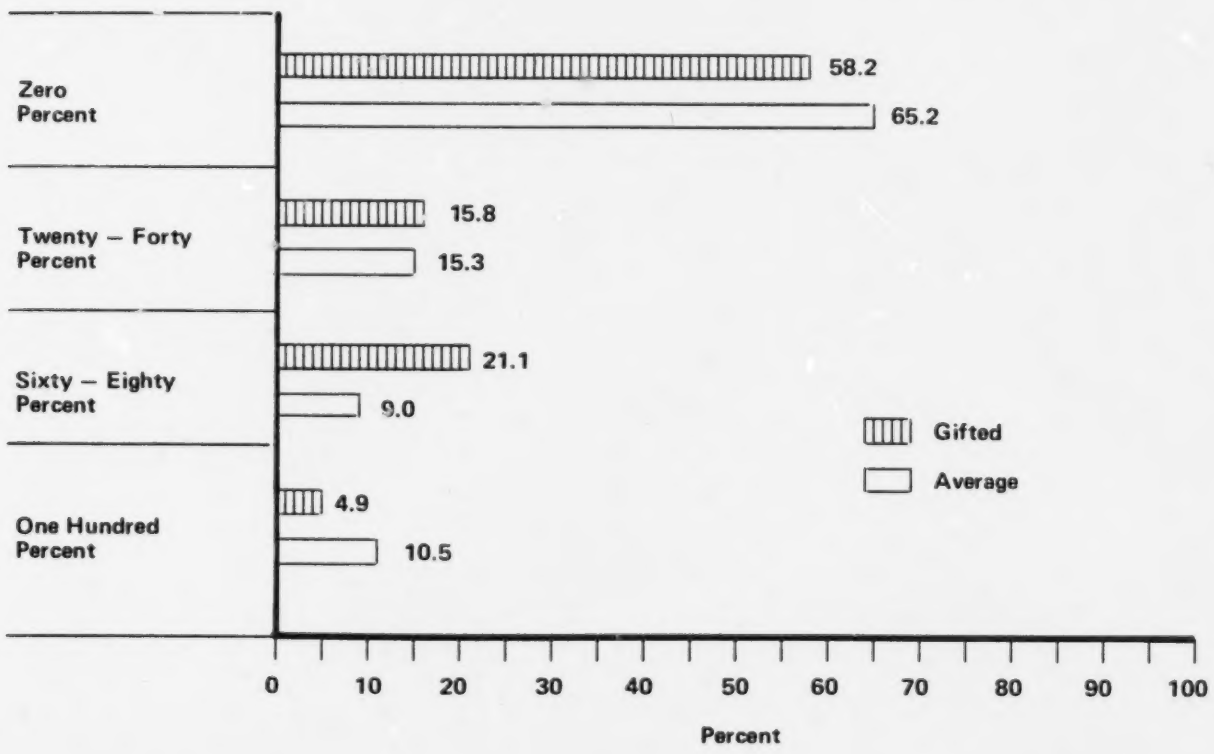
•How often in the past 3 years have you gone swimming or played golf or tennis?



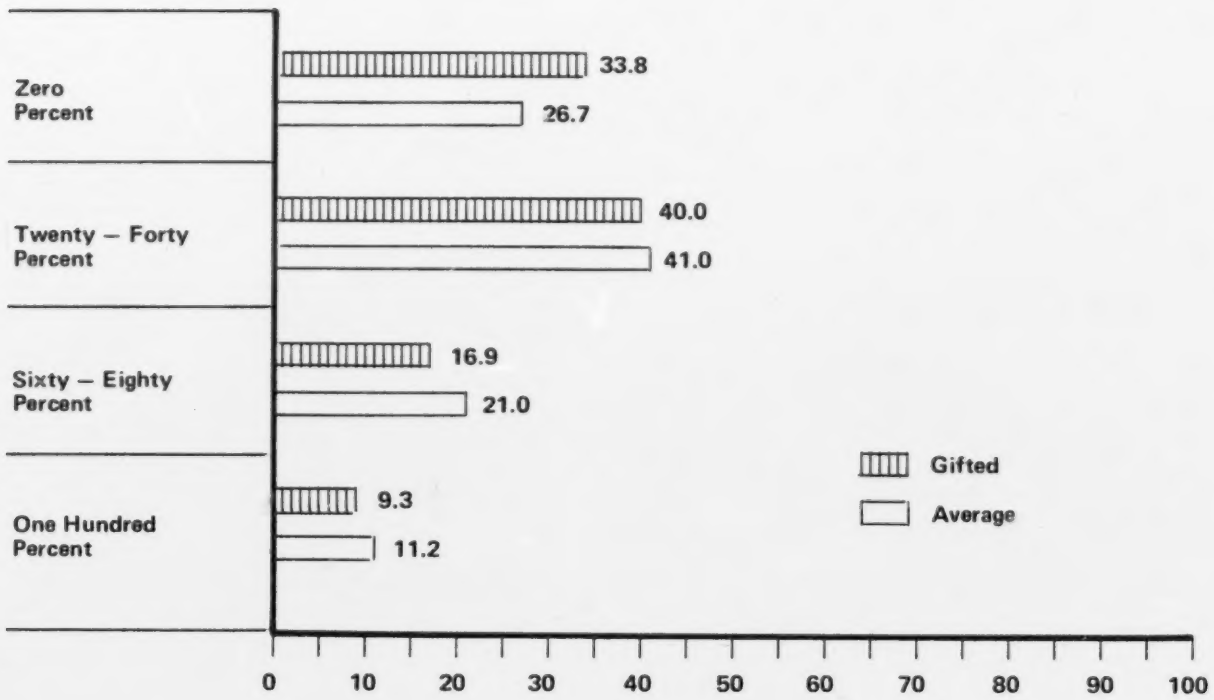
What percent of your spending money comes from a job?



What percent of your spending money comes from your regular allowance?



What percent of your spending money comes from your family as you need it?



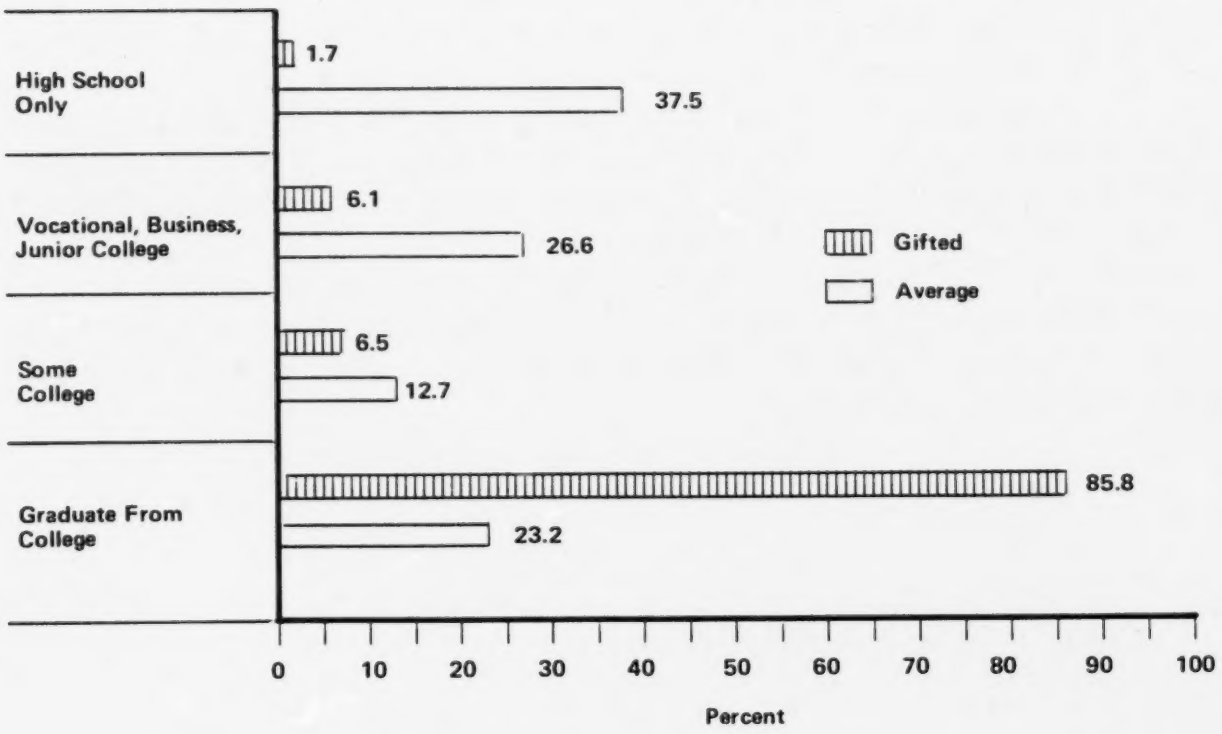
Educational Plans

5.25 The gifted sample had much higher post-high-school educational objectives than the average sample. Almost all of the gifted sample intended to go to college after they graduated from high school, and almost all of this group planning to enter college expected to graduate. The expectation of graduating from college was much more frequently found in the gifted than in the average sample—86% versus 23%. Although the number of gifted students not planning further education after high school was almost insignificant (2%), some 13% intended to go to business or vocational schools or attend college for less than the 4 years required for a bachelor's degree. (Comparison of these data with the results of the question from the first year follow-up on "type of school attending" shows a high correlation between plans and actual education pursued.) Although precise individual correlations showing the vocation followed by each of the gifted who did not attend or did not finish college are beyond the scope of this study, it is possible to extrapolate from the follow-up studies the occupational choices of those in the gifted sample who did not graduate from college. This will be discussed in the subsequent sections on follow-up.

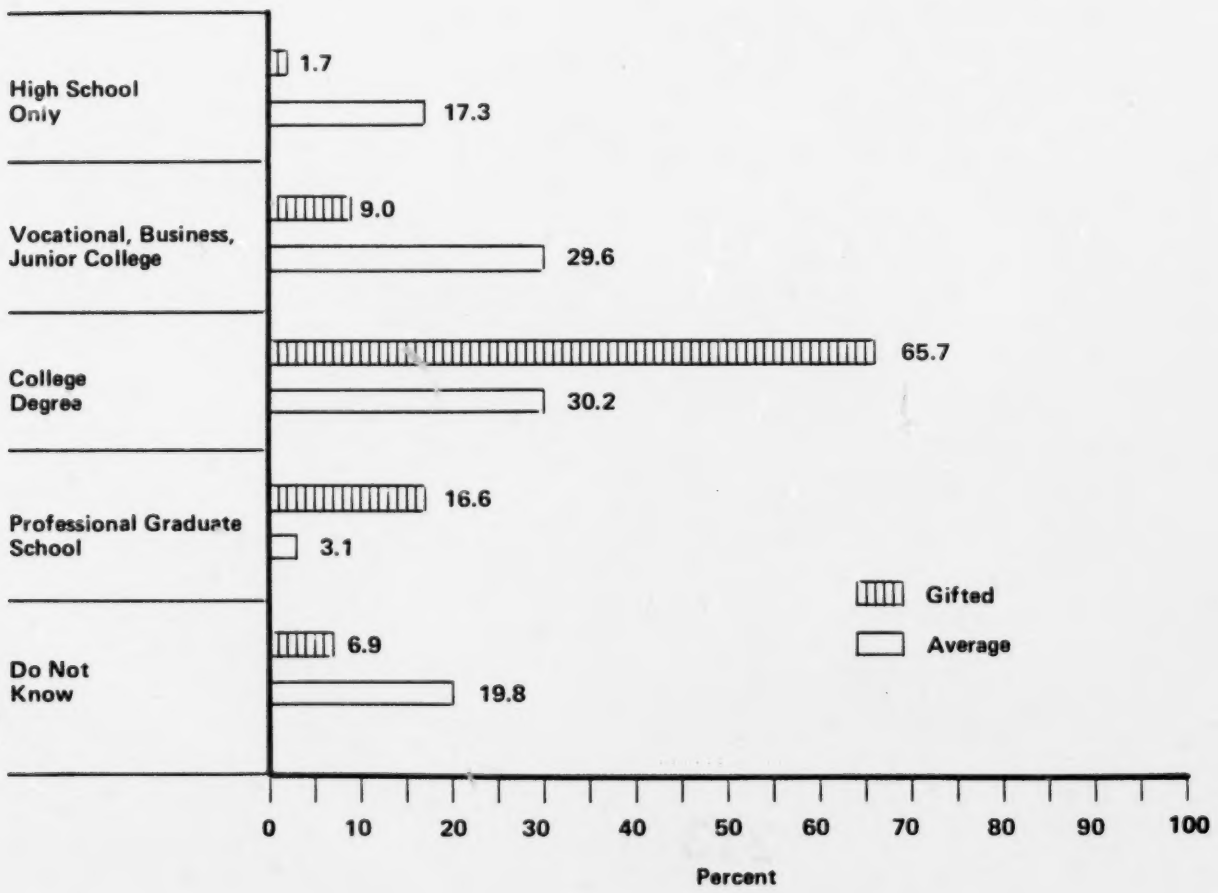
5.26 In addition to describing the education they expect to receive, the high school seniors were asked, "How much education do your parents or guardians want you to have?" For the gifted sample parents' wishes correlated roughly with the students' expectations. For the average sample, however, the parental expectations were somewhat higher than the education anticipated by the students. Only 17% of the parents of the average sample wanted their children just to finish high school and not continue their formal schooling, but 38% of the students indicated that they planned no education beyond high school. At the other end of the scale, 33% of the parents of the average sample expected their children to get at least a bachelor's degree, whereas only 23% of the students intended to complete at least 4 years of college. A surprisingly large group of average students (20%) reported that they did not know what their parents' educational expectations for them were. In the gifted sample 7% of the students did not know what their parents expected.

RESPONSES CONCERNING EDUCATIONAL PLANS

Education expected after high school:



How much education do your parents or guardians want you to have?

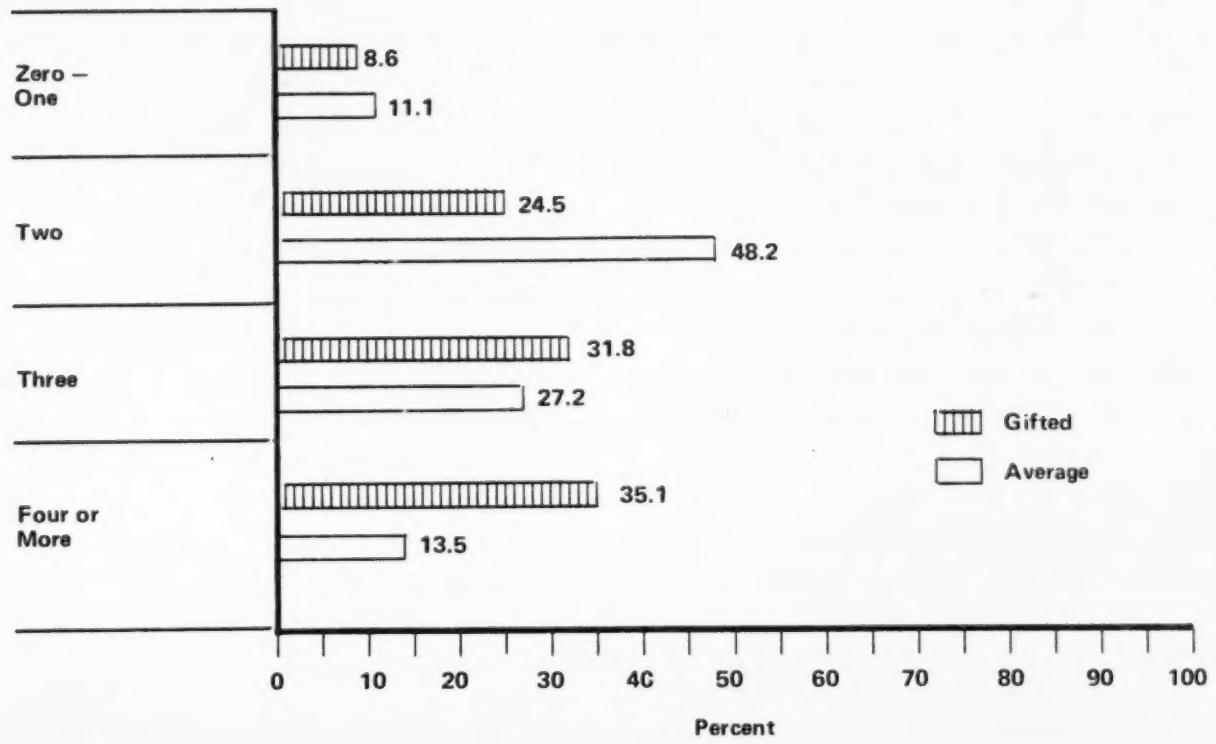


Career Plans

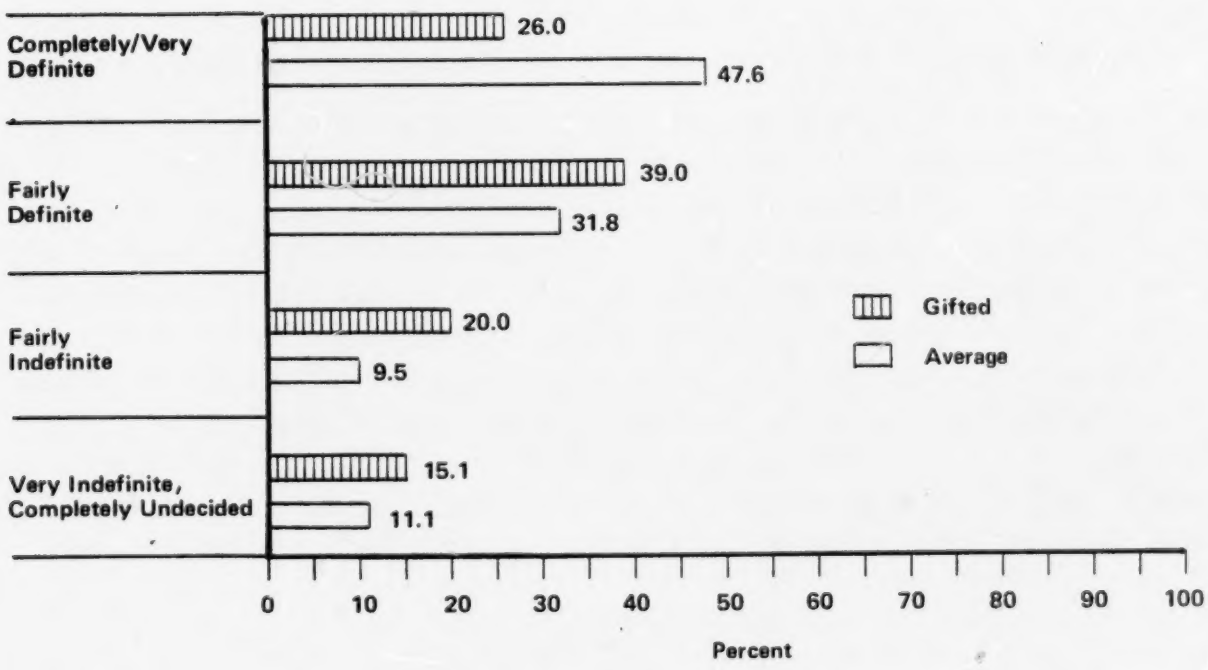
5.27 The average students generally were more decided on a specific career by the time they were seniors than were the gifted. Almost twice as many gifted as average (35% versus 21%) were indefinite or undecided about a career choice in the spring of the senior year. Of course, since almost all of the gifted planned to go to college, choosing a career could be postponed for a few years, if necessary. Another possible reason for the lack of a firm career preference among the gifted is the wider range of choices open to them. Whereas about 60% of the average students had considered entering no more than two careers, 67% of the gifted had seriously considered three or more occupations. Over one-third of the gifted had considered four or more possibilities. It seems likely that this wider range of alternatives would make the decision more difficult.

RESPONSES CONCERNING CAREER PLANS

How many different occupations have you seriously considered entering?



How definite is your present choice of an occupation?



FIRST-YEAR FOLLOW-UP

5.28 The first-year follow-up was primarily useful for comparing high school plans with what actually took place the first year out of high school. As expected, most of the students chose to continue their educations rather than seek immediate employment. A large segment of the average population (31%) however, did not attend any type of school. Among the gifted, the group not in school was 5% of the total population. Although the number of gifted out of school was considerably smaller than the number of average out of school, it still accounted for 1 gifted student in 20. With the addition of 10% of the gifted in trade schools, junior colleges, and business schools, the data indicated almost one-fifth of the most intellectually gifted youth in the nation are not attending a 4-year college. A great majority of gifted who intended to go to college but did not go reported their attendance was prevented by lack of money; 83% of the gifted who could not go to college gave finances as the reason. Although lack of money was also the reason most frequently mentioned by the average sample (37%), other factors such as low grades and lack of preparation (27%) and marriage (6%) also were important. Among the gifted, however, aside from various individual reasons not specifically categorized, only lack of money was cited by more than 3% of those who wished to go to college as the factor that prevented them from doing so.

5.29 We also know the reasons given by both groups for not wanting to go to college. Among the average students the most common reason was the desire to earn money (42%). Another common reason, given by 30% of the sample, was that they chose to attend other types of schools. Among the gifted,however, these reasons were not so popular. Only about one-third of the sample said that they did not go to college for any of the reasons offered—to earn money, or because they got married, entered the military, or attended another type of school. Some 65% gave other, more personal reasons for not wanting to go to college, but these were not categorized. (It must be remembered that the portion of the gifted sample who did not want to go to college was much smaller than that portion of the average sample.)

5.30 Of the gifted who had planned to enter college, 84% were in college at the time of the follow-up. Approximately the same number of gifted and average had entered and dropped out by the end of the freshman year (7%). Only 3% of the gifted who planned to go to college decided by the time of the follow-up that they probably never would go, but 6% of the gifted said they were postponing college for a few years. This compares with 38% of the average who planned but decided not to go to college and 9% who planned to enter at a later date. Of those who had entered college in September, 90% of the gifted and 84% of the average were still in school by the end of the academic year. The major reason for the gifted leaving school was rather unexpected in view of their apparent academic qualifications; over 5% said

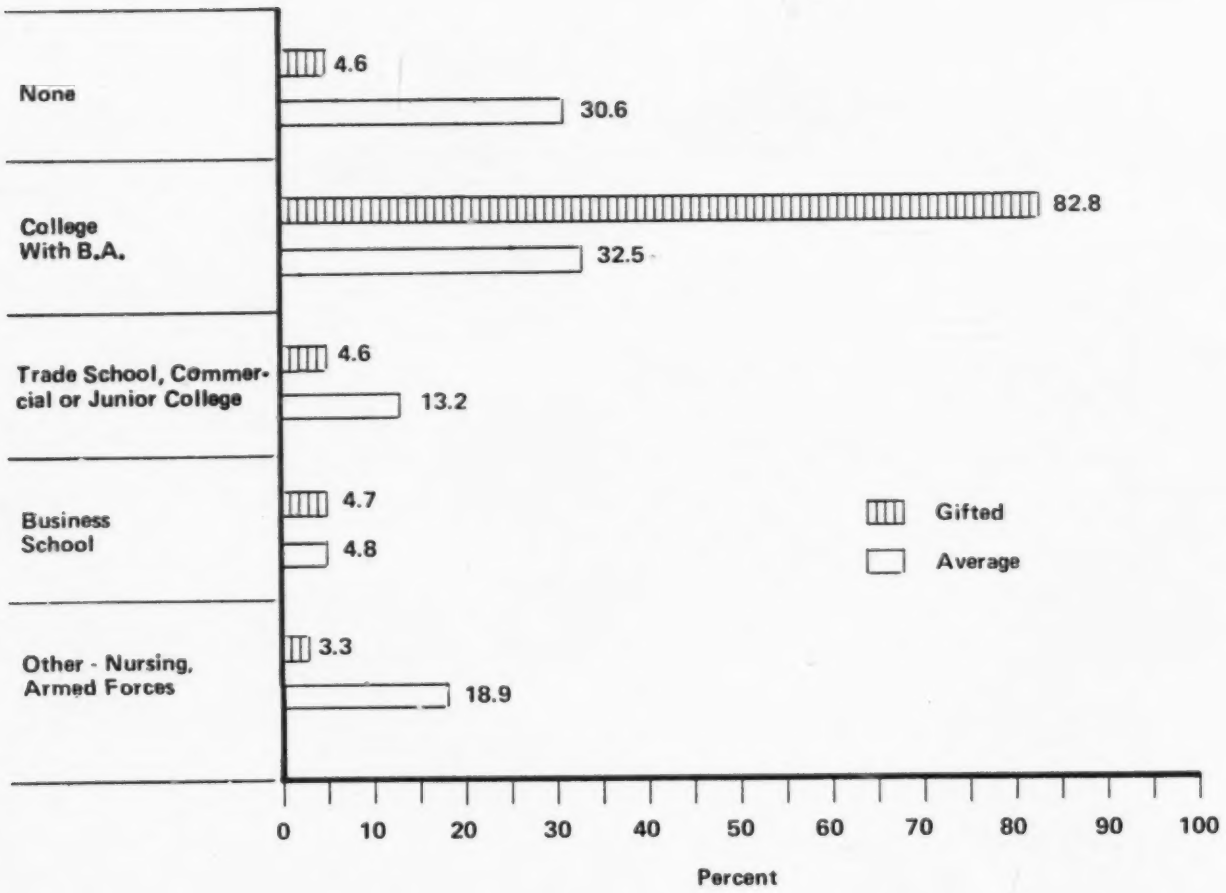
they left school because they were afraid they would fail or they actually did fail. Less than 1% of the average group reported leaving for these reasons. The number of gifted afraid of failure would seem to indicate that the gifted were unprepared either psychologically or academically for the stiffer competition in college. Perhaps their inability to get "easy As" in college was enough to shake their self-confidence.

5.31 Also unexpected was the reason for attending college given by most of the gifted. Sixty-four percent said that their main reason was that college graduates make more money. In contrast, only 48% of the average sample gave this response, although it was by far the reason most frequently given by both groups. The second major reason among the gifted (26%) was that college provides a means of making good personal contacts. Less than 1% of the gifted said they went to college because they enjoy learning or their chosen career requires college-level training.

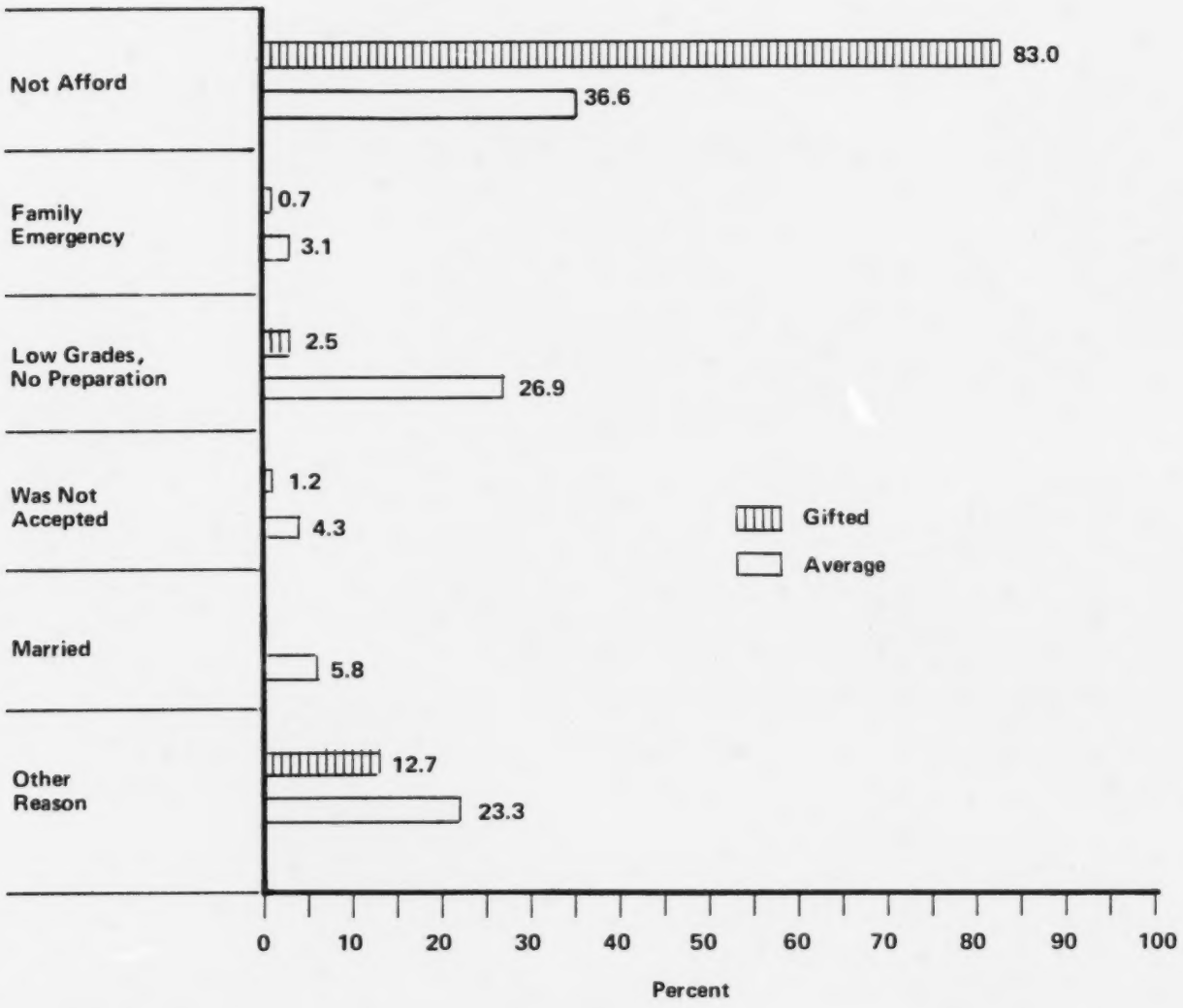
5.32 The majority of the gifted who were still in college at the time of the first-year follow-up planned to earn degrees beyond the bachelor's; 60% planned to pursue a master's or doctoral program. Among the average sample, however, all but 18% of those in college planned to stop with a bachelor's degree at most. The gifted were evenly split between the two advanced degrees, with 30% intending to earn an M.A. or M.S. and another 30% planning to get a doctorate or other professional-level degree. Their success in reaching these goals can cannot be determined until at least the time of the 10-year follow-up study.

FIRST-YEAR FOLLOW-UP FINDINGS

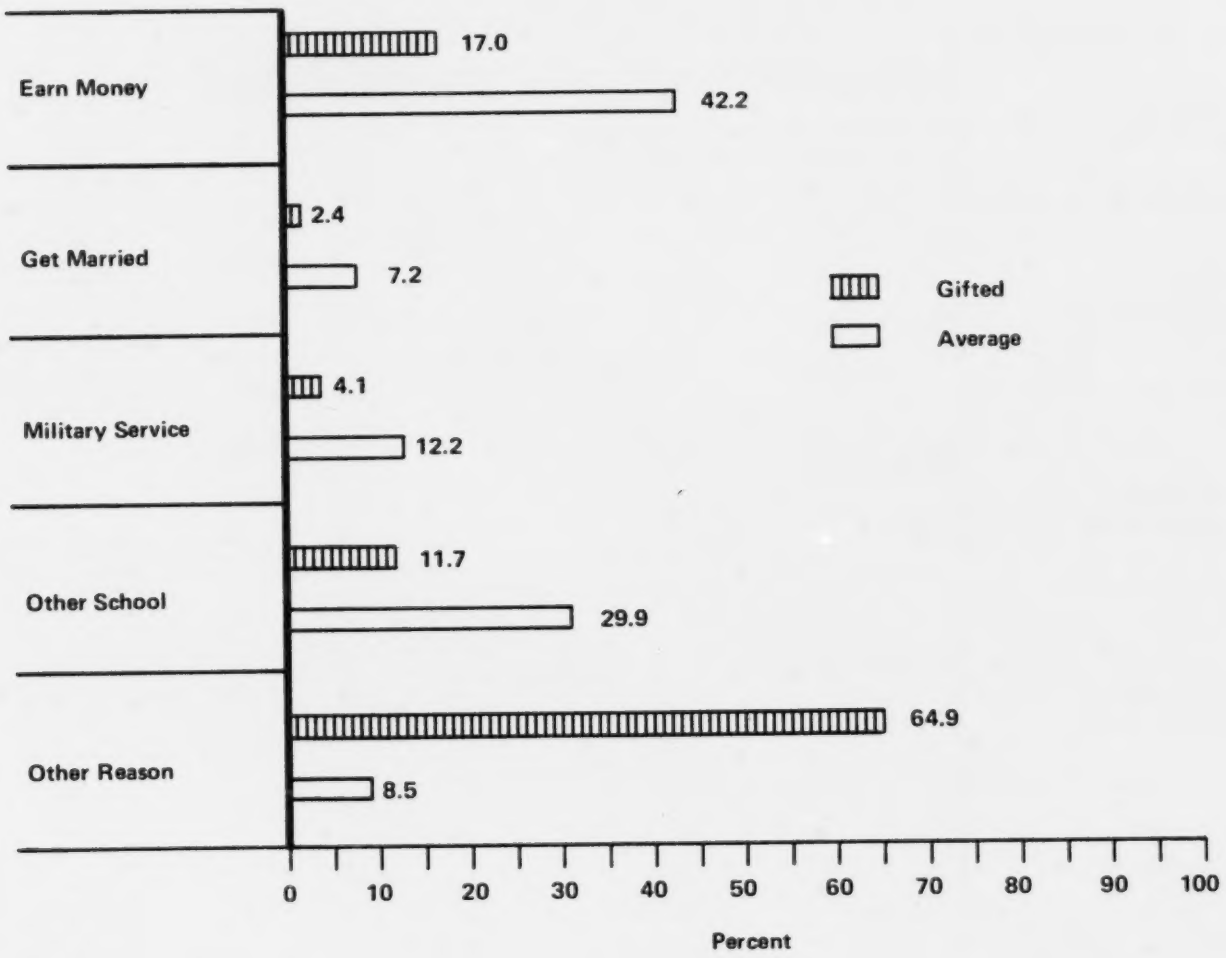
Kinds of schools attending:



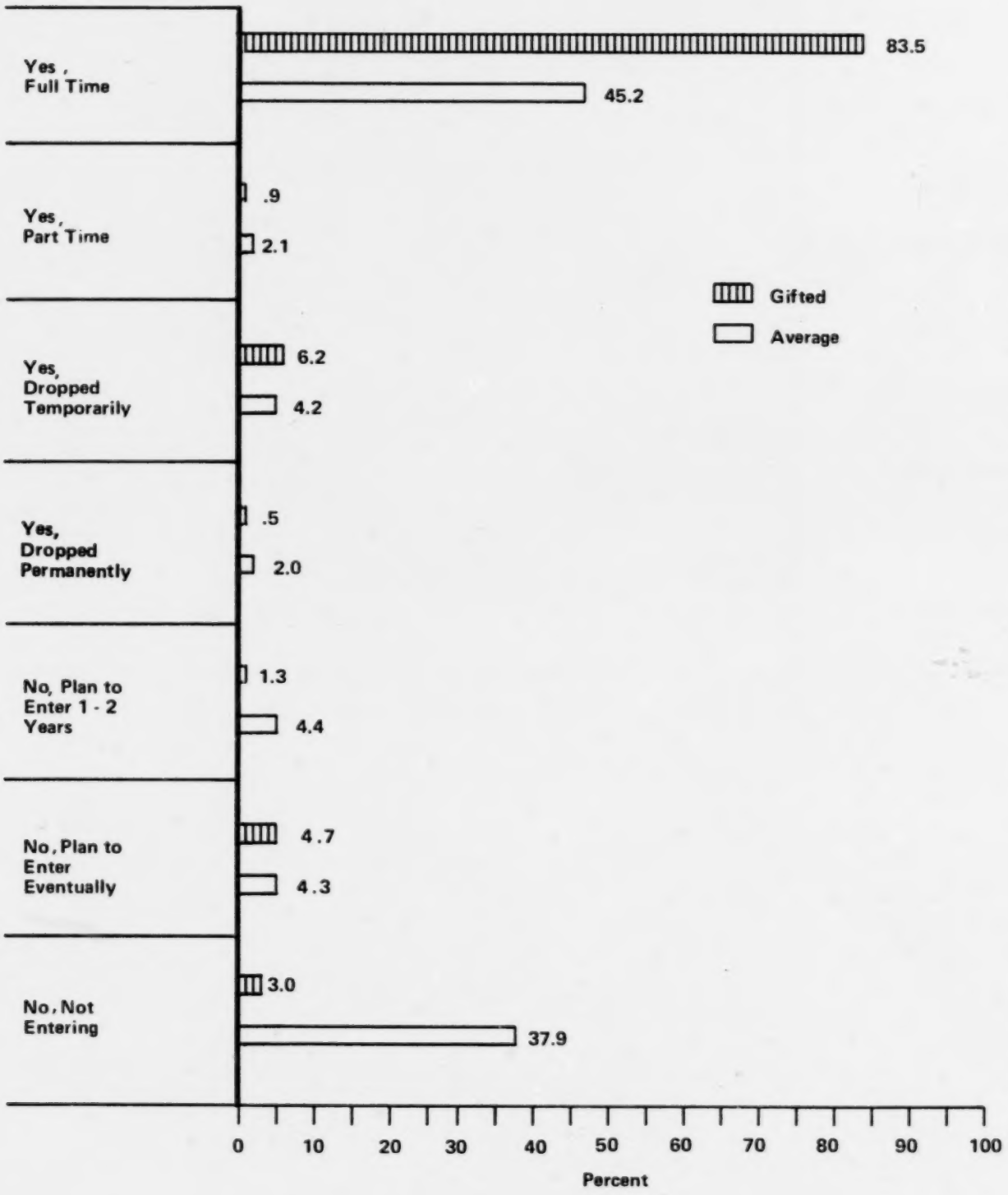
Reasons for not being in college (based only on those who had planned to attend):



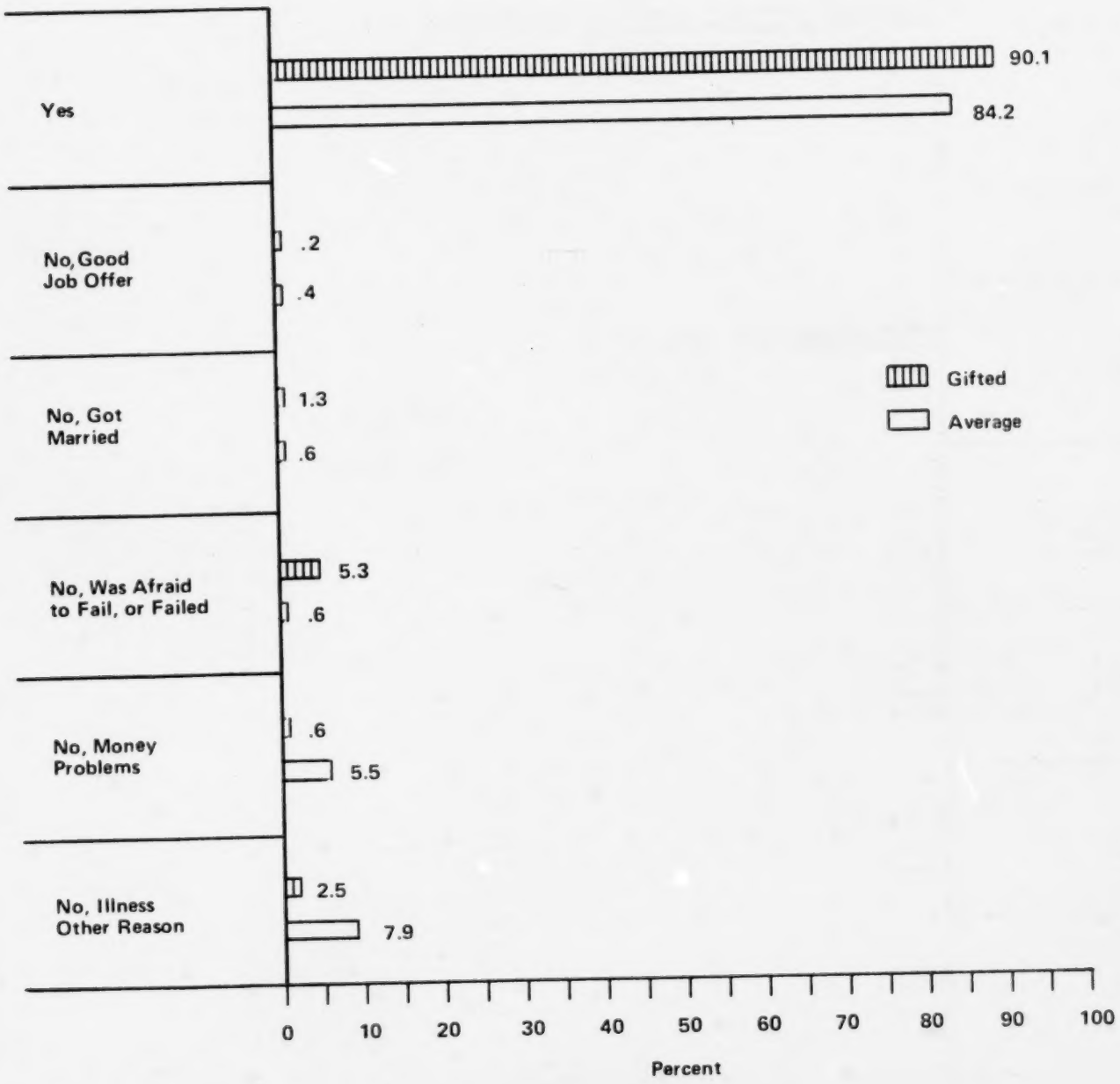
Reasons for not wanting to go to college (based only on those who did not want to go):



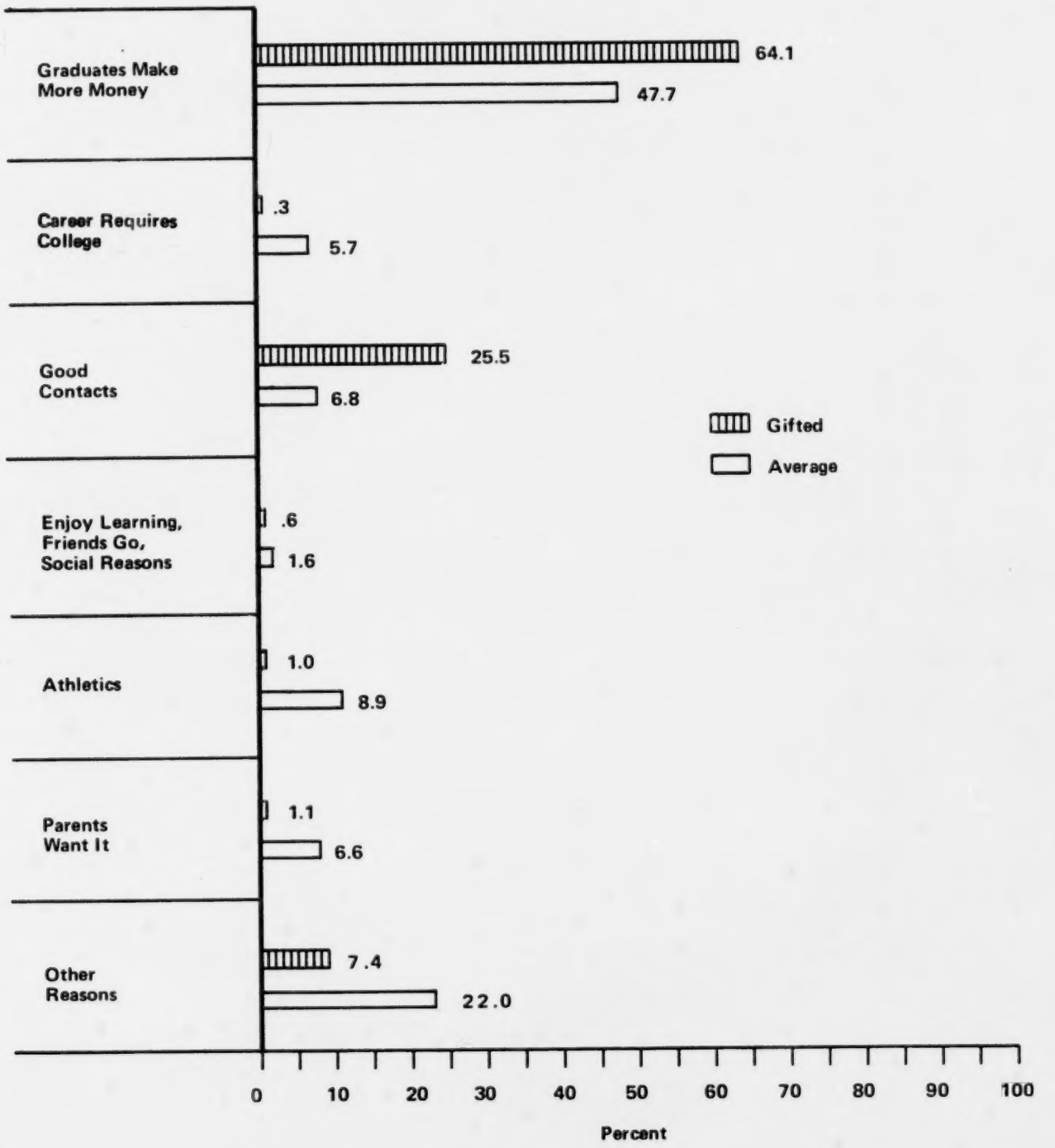
Did you attend college this year? Are you still enrolled?
(Based only on those who planned to enter college)



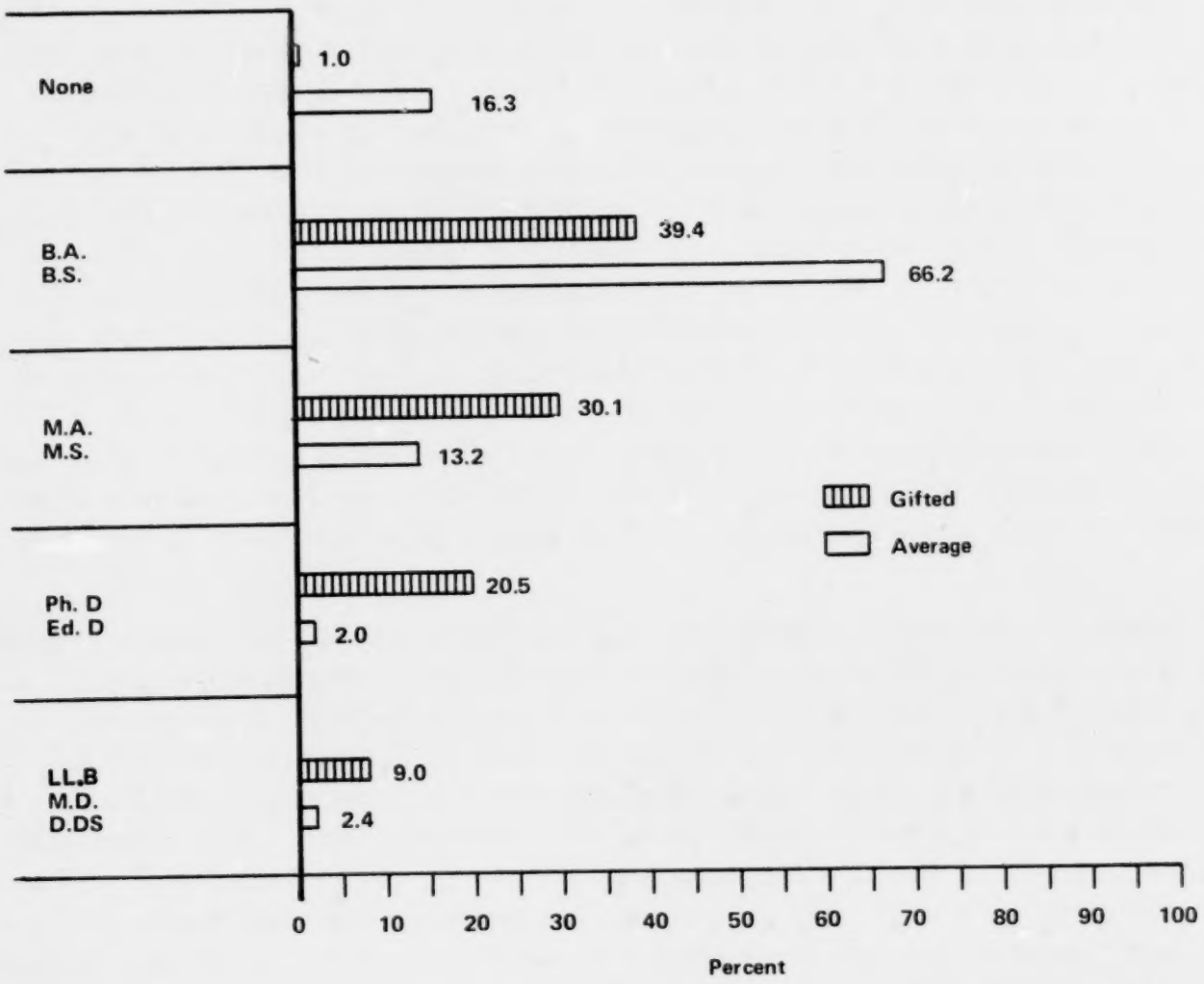
Are you still in college? If no, why not?
(Based only on those who entered college)



Why did you go to college?
(Based only on those in college)



What is the highest degree you plan to earn?
(Asked only of those in college)



FIVE-YEAR FOLLOW-UP

5.33 As was noted above, it is possible to infer from the 5-year follow-up the probable career choices of the gifted who did not attend college. Five years after high school graduation the Project TALENT samples were asked to identify their current jobs. It is helpful to recall that roughly 5% of the gifted sample was attending business or commercial school the first year after high school, and an additional 5% was attending trade school or junior college. As time went on more of the gifted apparently switched to secretarial and commercial training, because 5 years after graduation we find 10% of the gifted sample employed as secretaries or clerk-typists. Since one must assume that these are almost exclusively female occupations, and roughly 40% of the gifted sample is female, it can be inferred further that fully one-fourth of the intellectually gifted women high school graduates worked as secretaries or typists 5 years after graduation. It is interesting to note that the number of gifted in the secretary-typist category was 50% higher than the number of average students in this group. The secretary/clerk-typist category was the third most frequently listed occupation among the gifted. The first two were accountant and high school teacher, each of which accounted for 12% of the sample.

5.34 Some of the gifted sample who started trade school and junior college probably were represented in the "skilled worker" and "structural worker" category 5 years after they left high school. The overlap in these groups between type of school and job is, of course, not as direct as it would be for secretaries, since a wider range of occupations is involved. Skilled workers would include electricians, plumbers, printers, etc. The structural worker category would include bricklayers, painters, carpenters, etc. Some of these occupations might require only apprenticeship service instead of formal group classes, so that graduates who were not attending formal school the first year after graduation might have been in training for one of these occupations. The number of gifted working as skilled or structural workers was surprisingly high in relation to the number of average students working in these occupations. Although the number from the average sample engaged in these jobs was twice as high as the number of gifted(14% versus 7%), given the basic differences in the two samples one would expect an even greater split. Since the occupations listed were almost exclusively for males, the 7% of the total gifted sample serving in them probably represents some 12% of the intellectually gifted male high school graduates.

5.35 There are two possible interpretations for this relatively large incidence of secretaries and skilled workers among the gifted population. First, one could assume that it represents an under-utilization of ability and, therefore, a problem both for the individuals themselves and for the education system, which must take part of the responsibility for letting so many of its gifted youth drift into jobs that do not challenge their abilities and utilize their talents. Another possible interpretation is that the gifted youth chose

these particular occupations because of their own interests and preferences and that they are quite satisfied with their jobs.

5.36 A rough indication of the amount of job satisfaction found among persons in each of the occupational categories listed can be derived from a second question in the 5-year follow-up survey. In addition to being asked to identify their current jobs, the sample groups also were asked to describe the careers they expected to be following in 5 years. If they were happy with their current jobs, they presumably would not plan a change of field for at least 5 years.

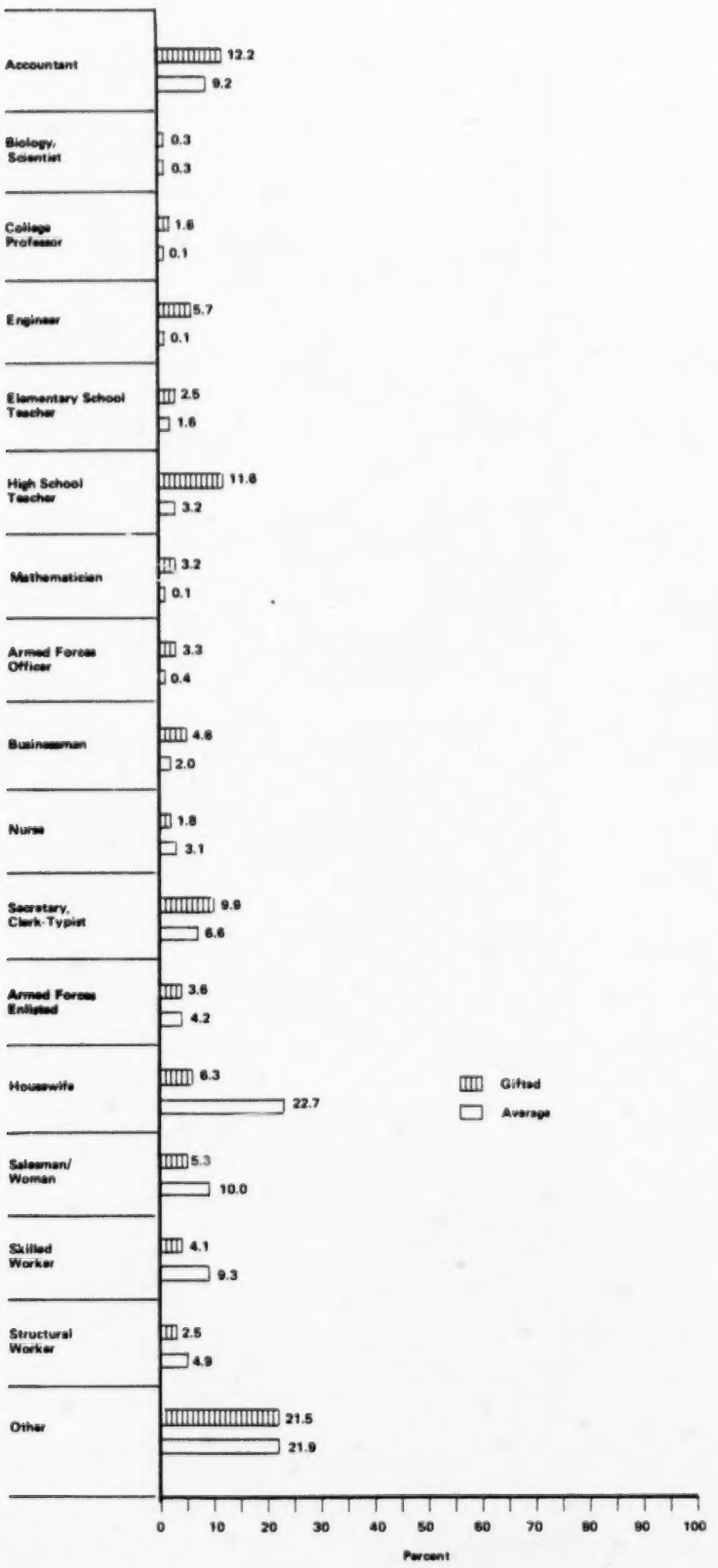
5.37 The most dramatic responses to this question were given by the gifted in the secretary, skilled worker, and structural worker categories. In 1965, 10% of the gifted were serving as secretaries. Less than 1% of the gifted sample planned to be secretaries in 1970. That means at least 90% of the gifted sample serving as secretaries did not plan to continue in that profession. Also, they apparently did not plan to retire to the role of housewife either, since the number planning to be housewives was actually 1% lower than the number of those who were housewives in 1965. It must be noted that the number in the average sample who wanted careers as secretaries or typists also was smaller than the number of those who had such jobs in 1965. For the average sample, however, the decrease was from 7% to 4%, negligible when compared with the potential decrease found among the gifted sample.

5.38 Of the 7% of the gifted sample serving as skilled workers or structural workers in 1965, almost none wished to continue in that type of job. Less than $\frac{1}{2}$ of 1% of the gifted sample intended to serve as skilled or structural workers 10 years after they graduated from high school. Among the average sample the decrease was from 14% to 13%, barely noticeable. (There was only one career less popular than these—armed forces enlisted man. None of the 3.6% of the gifted serving in that capacity in 1965 intended to make a career of the service. One can safely assume, however, that many of those in this occupation in 1965 did not choose it voluntarily.)

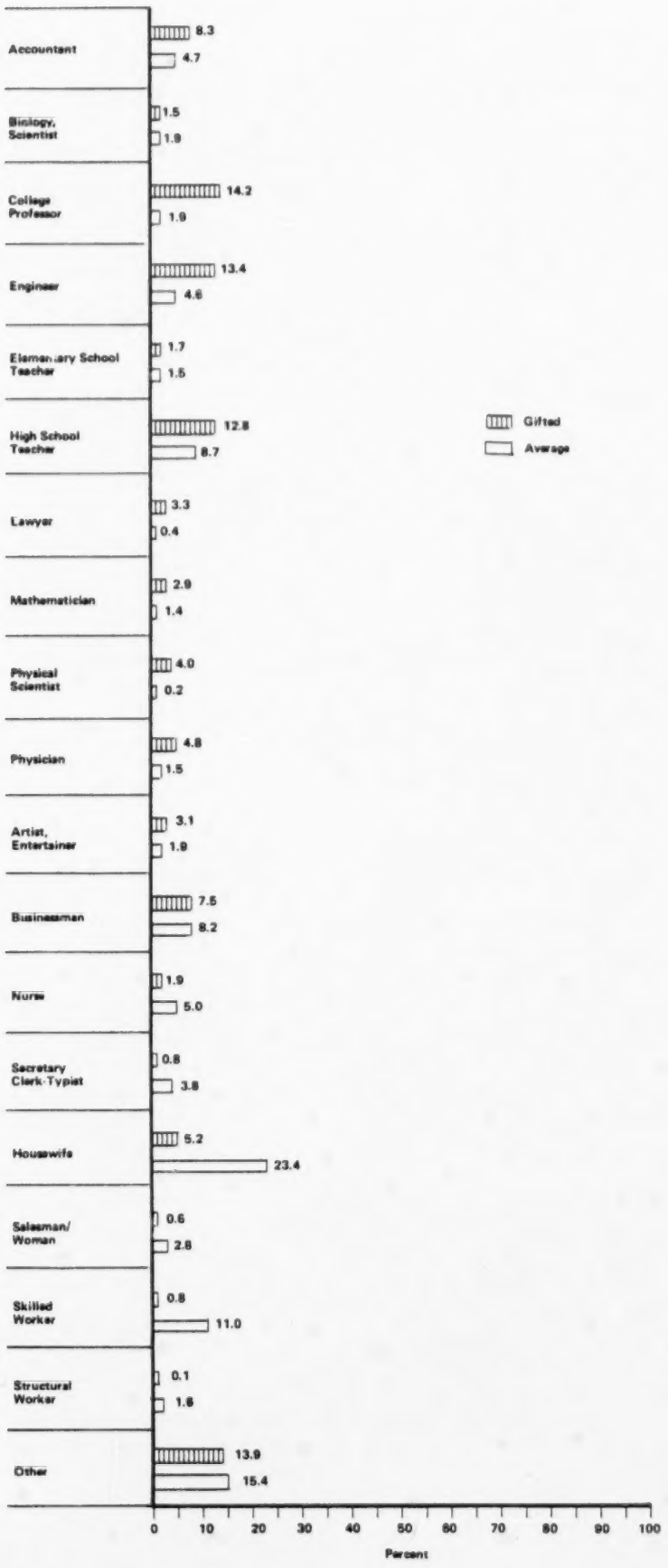
5.39 Since the 10-year follow-up study has not yet been conducted, we do not know how many, if any, of the gifted were or will be able to change occupations successfully. All we know is that 5 years after leaving high school at least 17% of the gifted were serving in jobs that did not fully utilize their intellectual abilities, jobs that they hoped to leave soon. Whether they were able to obtain more satisfactory employment would be an interesting aspect of the 10-year Project TALENT follow-up.

FIVE-YEAR FOLLOW-UP FINDINGS

What is your current job?



Anticipated career in 5 years:



VI. COMMENTS ON THE DATA[1/]

VALIDITY OF DATA PRESENTLY AVAILABLE ON THE GIFTED AND TALENTED

6.1 It appears that "gifted" is a word that people react to with considerable emotion. For this reason, it is difficult to find two educators (other than specialists) who agree what a "gifted child" is. Interviews with the project team on the School Staffing Survey indicated that the principals who completed the questionnaire demonstrated very little agreement as to whom they considered "gifted" and "talented" within the survey's broad definition.

6.2 A further problem in obtaining valid data on the gifted and talented is that it appears there are no national surveys which have been designed especially for that purpose. In almost every case such data are collected as an afterthought, or, as in the case of School Staffing Survey, on a questionnaire about the handicapped. One must question the validity of information gathered when "gifted" and "talented" are identified between "mentally retarded" and "special learning disabilities."

6.3 With the exception of Project TALENT (1960) there are virtually no objective national data on the gifted. What has been collected thus far usually amounts to opinion from poorly qualified, untrained judges.

6.4 Every test presently used to identify G&TC&Y is biased in favor of the population for which it was written. Even the standard WISC, an individual IQ test used to validate group IQ tests, is biased with its pictures, words, and

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[1/] Since no attempt has been made by the present contractor to interpret the information presented in this report, these comments concentrate only on issues concerning the collection of data on the gifted and talented.

questions. Rarely has a test of intellectual potential been written for and standardized on a group of disadvantaged children.

6.5 For this reason, the potentially gifted or talented child from an American subculture is usually not identified as such. The problem is admittedly complex, because of conflicting tasks: it is necessary to view the disadvantaged child in relation to his cultural norms as well as in relation to national norms. This conflict might well be resolved through the use of the high-speed, telephone-access computer.

Use of the Computer

6.6 With a computer, individual and group test items can be assembled from an information bank, according to the cultural norms of each child or group tested. Item weights can be computed according to mathematical models to account for level of education, age, cultural exposure, etc., all within seconds. The resultant score would reflect potential with far greater purity than any IQ test. The computer could easily be programmed to suggest the type and amount of differentiated education needed to maximize the child's learning activity.

6.7 Relating the culturally deprived child's score to the average child's score also could be done in seconds; however, such a relationship would have to be interpreted with great care. It would indicate for example, that considering the fact that Johnny has never been exposed to literature in the home, nor has he learned to value scholastic achievement, etc., he has progressed farther than 95% of children his age who were raised in similar circumstances. Thus Johnny could be considered "gifted." Even though he is failing in school, he has a learning potential superior to perhaps 75% of the children in a national cross-cultural sample (had they all been born into an environment similar to his). Nevertheless, because of lack of exposure and motivation, his academic performance is in the lowest 25% of children his age in a national sample, and normally he would not be considered gifted. This concept of "gifted" could be used to help break the cycle of poverty by identifying and bringing special aid to the poor but potentially gifted.

National Awareness

6.8 It would appear that many school principals are not fully aware of the meaning of "gifted or talented student." In fact more than half the school principals in this country claim they have none. Perhaps it is time to educate these educators in terms of

- How to identify gifted and talented children
- How to educate gifted and talented children
- How to "feel" about gifted and talented children.

There is apparently a great need for a Federally sponsored program to stimulate this kind of awareness.

Visibility

6.10 Throughout this study evidence of public hostility toward aid for the gifted and talented was experienced by ORI staff members. A program to stimulate public awareness of and interest in the problems of the gifted and talented might be undertaken.

CONCLUSION

6.11 It can safely be concluded that there is a dearth of valid, reliable information on the gifted and talented. Steps must be taken to rectify this situation so that the needs for educational programs for these children and youth can be assessed more accurately. Until such information is available, the best approximations should be used when making decisions that affect such programs.

APPENDIX A

ADVOCATE SURVEY TASKS AND PROCEDURES

TASKS 1 AND 2: DETERMINE INFORMATION REQUIREMENTS AND DEFINE THE SCOPE OF THE STUDY

A.1 The information requirements of this study were broadly defined at the Commissioner of Education's Conference on Implementation of the Gifted and Talented Children's Educational Assistance Amendments. The conference, held on September 14-15, 1970, in Washington, D. C., was attended by 12 national experts in education for the gifted, by several USOE staff members knowledgeable in the area, and by ORI staff. Information presently available was discussed and significant gaps were identified by the conferees. The Advocate Survey was tentatively outlined as a means of filling in the more important gaps. Specific information requirements were established and later refined in conference with USOE staff members and consulting experts. The study objectives and scope were developed by the ORI staff in cooperation with the USOE.

TASK 3: DEFINE RESOURCE POPULATION

A.2 It was necessary to define a universe of experts in differentiated education for the gifted and talented. This was done by asking the conferees at the Commissioner's Conference to name all of the people that they, as experts, felt to be outstanding contributors to the field of education for the gifted and talented children and youth (G&TC&Y) or to be in possession of special knowledge in this area. In addition, a literature search was performed to collect names of outstanding writers in the field. The preliminary mailing list was then sent to all conferees for their additions and/or deletions. The final list consisted of the names of all individuals generally agreed upon by the conferees.

TASK 4: DEVELOP THE SURVEY INSTRUMENT

A.3 Once the information to be gathered was carefully defined, an analysis plan was devised in cooperation with the USOE. From this plan, tentative questionaire items were written for evaluation, in accordance with several questionnaire format techniques. Several expert consultants aided in the formulation of specific questions. The most effective format for each individual item was selected in most cases. In the case of related questions, we selected the format that would afford greatest continuity and clarity to the series as a whole.

A.4 The length of the questionnaire necessitated the use of a great many standard and modified techniques to maintain interest. For economy of scoring, as many answers were precoded as possible; nevertheless, the nature of the data made open-ended questions unavoidable. Finally, the questionnaire was then pretested on a group of experts, after which NCES and OMB approval were obtained.

TASK 5: DEVELOP MAILING AND LOGGING PROCEDURES

A.5 Special mailing and logging techniques resolved the conflict between the need for intensive follow-up and the need to ensure the confidentiality of responses. Code numbers were used to identify the questionnaires, rather than names. Thus, responses were not identified with particular individuals. The identification codes made it possible to follow up on questionnaires that were not returned within a prescribed time period. A response checklist was maintained by code number, that showed the date each questionnaire was mailed and the date of return. Three attempts were made to obtain late questionnaires—two telegrams were sent, at intervals, and finally a telephone call was made. The response rate achieved was high—91%.

TASK 6: DEVELOP CODING AND QUALITY CONTROL SYSTEM

A.6 Open-ended items present some difficulties in the coding of questionnaire responses for computer processing. To develop the most accurate possible system, the ORI coding team used a large sample to devise a set of preliminary codes. This set of codes was continuously revised through the interaction of the coding team and the coding supervisor, to allow for the wide latitude of responses received. Each coder was checked for accuracy by a supervisor who regularly recoded a sample of questionnaires. In the beginning, the samples subjected to this quality control process represented 33% of each coder's output. Toward the end, 20% of each sample was recoded. The large quality control sample size was needed because of the complexity of the task and the need for uniformity of code selection. All coders maintained an error rate of under 0.007, which represents 7 errors per 1,000 coding decisions. (Note: A standard practice is to use a 2.5%-5% quality control sample, with an acceptable error rate of 50 per 1,000 decisions.)

TASK 7: CONVERT CODED QUESTIONNAIRES TO COMPUTER TAPE

A.7 Coded questionnaires were keypunched and key verified. A 20% sample was then individually examined for errors, by hand. The percentage of keypunching errors detected was less than 0.01. Finally, all data cards were subjected to a field-by-field, parametric range check edit routine and all errors were corrected before the cards were taped.

TASK 8: DEVELOP COMPUTER ANALYSIS PROGRAMS

A.8 Existing ORI library programs were modified for use in the present analysis. All programs were checked for validity to ensure accurate tabulation. Computer printouts were edited and the results formatted by the ORI Art Department, for ease of reading.

TASK 9: PREPARE MIAMI BRIEFING

A.9 Preliminary results were prepared in the form of color slides that were presented at the USOE-SEA Conference on Education for the Gifted and Talented, April 18-21, 1971.

TASK 10: INTEGRATE THE DATA AND CONSULTANT INPUT INTO FINAL REPORT

APPENDIX B

THE ADVOCATE QUESTIONNAIRE

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

As you are probably aware, the Elementary and Secondary Education Amendments of 1969 (PL 91-230, Section 806), require the Commissioner of Education to report to the Congress on the status and needs for education of gifted and talented children throughout the nation. In order to do this, the Office of Education has been engaged in a broad study which includes the analysis of statistics on school services to gifted and talented students, a review of the Federal education programs which benefit this population, and the holding of public hearings throughout the country in order to obtain more precise regional interpretations of the need for educational programs for the gifted and talented.

Additionally, it has been found necessary that we establish the rationale for exemplary differentiated education for gifted and talented students, with which current efforts and Federal programs can be evaluated. In order to do this, we have developed a survey to be submitted to recognized leaders and experts in education of the gifted and talented.

You have been selected by a consultant panel of nationally recognized experts in the field as a leader in the education of gifted and talented children. As such, I need your assistance, as a respondent to the survey, in establishing ideal models and criteria for differentiated education programs for these children in your State and throughout the nation.

Because each respondent for this study was carefully selected on the basis of his acknowledged expertise in this area, total participation is essential. I hope

have any questions about the form, please call Mr. Plantec collect at (301) 588-6180 between 9:00 a.m. and 5:00 p.m. (EST).

I urge your fullest cooperation in this effort. You may be assured that your response will be held in complete confidence.

Sincerely,

S. P. Marland, Jr.
U. S. Commissioner
of Education

Operations Research, Inc.
A subsidiary of Leasco Systems Corporation
1400 Spring Street, Silver Spring, Maryland 20910
Telephone: 588-6180, Area Code 301

Dear Colleague:

It has occurred to me that you will probably be interested in the results of this survey. This survey and others will be used in the Commissioner's report to Congress. Although publication plans are not definite at the present time, please check the box below and return this letter with your completed questionnaire if you would like a summary of the data collected in this survey effort.

Very truly yours,

Peter M. Plantec

☐ Please send me a data summary.

O.M.B. Approval No. 51S 70037

Expiration Date: April 30, 1971

OE Form: 119 DASPRE

I.D. Number _____ Position _____ Employing Agency _____

Please Print — Please Print

Many of the items in this questionnaire will require you to answer in terms of the state about which you are most knowledgeable.

Which state is that ? _____

PLEASE ANSWER ALL QUESTIONS TO THE BEST OF YOUR KNOWLEDGE

I. A DEFINITION FOR GIFTED AND TALENTED

The following is an operational definition of "gifted and talented" developed for the Commissioner of Education. Your assistance is needed to delineate the scope of the definition.

> **Gifted and talented children are those who are capable of high performance as identified by professionally qualified personnel. These are children who require different education programs and/or services beyond those normally provided by the regular school program in order to realize their full potential in contribution to self and society.**

Please indicate which of the following criteria should (Yes) and should not (No) be specified in the definition of gifted and talented children.

1. Children "capable of high performance" should include those with high:

	Yes	No
a. Underdeveloped potential	☐	☐
b. General intellectual ability	☐	☐
c. Specific academic aptitude	☐	☐
d. Creative or productive thinking	☐	☐
e. Leadership ability	☐	☐
f. Social adeptness	☐	☐
g. Ability in visual and performing arts	☐	☐
h. Psychomoter ability	☐	☐
i. Other *(specify)* _____	☐	☐

The folllowing questions require response on the scale below; there are four choices. Circle one for for each item.

No	R	I	E
NOT to be used	RARELY used, avoid where possible	IMPOR-TANT criterion for selecting gifted	ESSENTIAL to the identification of gifted

2. What minimum criteria should be used to identify gifted and talented children ?

a. **Group intelligence test** .....No .....R .....I .....E
b. **Individual intelligence test** .....No .....R .....I .....E
c. **Achievement tests (standard)** .....No .....R .....I .....E
d. **Achievement tests (local)** .....No .....R .....I .....E
e. **Teacher judgment** .....No .....R .....I .....E
f. **Professional talent evaluation** .....No .....R .....I .....E
g. **Demonstrated achievement** .....No .....R .....I .....E
h. **Psychologists evaluation** .....No .....R .....I .....E
i. **Apparent psychological adjustment** .....No .....R .....I .....E
j. **Creativity test** .....No .....R .....I .....E
k. **Other** *(specify)*

_____ .....No .....R .....I .....E

3. Persons "professionally qualified" to identify gifted and talented children should include:

	Yes	No
a. **Teachers**	☐	☐
b. **School administrators**	☐	☐
c. **School psychologists**	☐	☐
d. **Guidance counselors**	☐	☐
e. **Curriculum specialists**	☐	☐
f. **Artists, musicians and others qualified to appraise pupils' competencies in a specialized area of talent**	☐	☐
g. **Other** *(specify)* _____	☐	☐

4. A differentiated education program for the gifted and talented should be characterized by:

	Yes	No
a. **A differentiated curriculum that develops higher cognitive functioning and/or specialized talents**	☐	☐
b. **Instructional strategies and curriculum content that accommodate the learning styles of the gifted and talented**	☐	☐
c. **Special administrative arrangements to implement a. and/or b. above**	☐	☐
d. **Other** *(specify)* _____	☐	☐

5. What percentage of the average school population would you consider as gifted and talented ?..... _____%

6. For the purpose of curriculum planning, do you think that gifted and talented should be defined separately ?.....**Yes** ☐ .....**No** ☐

   a. If yes, approximately what percentage of the average school population would you categorize as:

   Gifted ? ..... _____%

   Talented ? ..... _____%

   b. Do you personally distinguish between gifted and talented ?

   ..... **Yes** ☐ .....**No** ☐

   c. If yes, how do you differentiate them ?

   _____

   _____

   _____

   _____

7. How often should screening for gifted and talented be held ? ***(check one)***

   Weekly .....☐

   Monthly .....☐

   Semi-annually .....☐

   Annually .....☐

   Unscheduled .....☐

   Other ***(explain)***

   _____....☐

   Should children selected for the program be reevaluated ? .....**Yes** ☐ .....**No** ☐

   If yes, how often ?_____

8. Who should be responsible for the identification of gifted and talented students in a school district ?

   _____

   _____

9. Please add here any further comments you have on the overall usefulness of the operational definition as you have refined it in the above questions.

   _____

   _____

   _____

   _____

   _____

   _____

   _____

10. Would this operational definition be effective in communicating with:

	Yes	No	Don't know
a. Administrators in general education	☐	☐	☐

If no, what modifications would be needed to facilitate communication?

_____

_____

_____

_____

	Yes	No	Don't know
b. Teachers	☐	☐	☐

If no, what modifications would be needed to facilitate communication ?

_____

_____

_____

	Yes	No	Don't know
c. Legislators	☐	☐	☐

If no, what modifications would be needed to facilitate communication ?

_____

_____

_____

_____

	Yes	No	Don't know
d. Lay public	☐	☐	☐

If no, what modifications would be needed to facilitate communication ?

_____

_____

_____

_____

	Yes	No	Don't know
e. Pupil personnel services staff (guidance counselors, school psychologists, etc.)	☐	☐	☐

If no, what modifications would be needed to facilitate communication ?

_____

_____

_____

_____

II. EDUCATION FOR THE GIFTED AND TALENTED

A. PHILOSOPHY AND OBJECTIVES

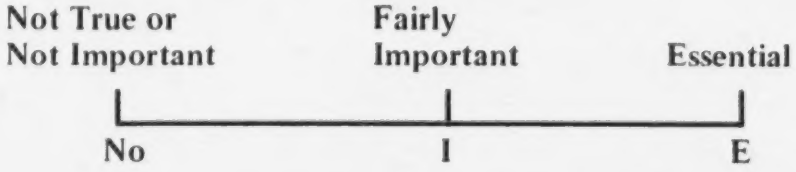
The purpose of this section is to obtain your opinion concerning the relative importance of various philosophical approaches to education for the gifted and talented. Although there are many items to be covered, the technique employed allows this section to be completed in a short time. In the interest of brevity, "gifted and talented" will be abbreviated as **"gifted."**

Please read the **Scale Value** definitions, familiarize yourself with the associated code letters, and proceed to rate each statement. Each evaluation should be made considering **only your own** personal philosophy.

The following pages contain a number of statements describing possible approaches to differentiated education for gifted and talented children. Some you will probably agree with, some you will probably not agree with. Each statement is followed by a scale designed to determine your evaluation of the relative need for each concept in developing an ideal program for the education of the **gifted.**

You will have 3 choices:

Circle the value that most nearly fits the accompanying concept.



No: A rating of "No" should be given to all concepts that you feel would weaken or destroy a program either because they are not true or because you believe that even if they are true they are usually not important enough to be considered for inclusion in a program.

I: A rating of "I" should be given to all concepts that you consider to be fairly important and potentially useful to some programs for the gifted.

E: A rating of "E" should only be given to those concepts which you believe to be essential to any program of education for the gifted.

CONCEPT	RATING: Not True or Not Important	Fairly Important	Essential
1. **Gifted*** children need more emphasis on multiple thinking processes, including creative thinking, logical thinking and critical thinking than average children	No	I	E
2. **Gifted** children should be expected to perform at higher levels of complex thinking than average children	No	I	E

* **Remember: " gifted"** = gifted and talented

CONCEPT	RATING Not True or Not Important	Fairly Important	Essential
3. Program content for **gifted** children should be geared to accommodate their more rapid intellectual growth	No	I	E
4. With the **gifted**, special care must be taken to foster social as well as intellectual growth	No	I	E
5. **Gifted** children need a more enriched learning environment than average children	No	I	E
6. Teachers of **gifted** should minimize structure of tasks	No	I	E
7. **Gifted** children need more emphasis on self-evaluation than average children	No	I	E
8. **Gifted** children need more emphasis on affective awareness than average children	No	I	E
9. Development of aesthetic sensitivity should be stressed in an educational program for the **gifted**	No	I	E
10. Conventional curriculum requirements should be covered at each grade level in differentiated programs for the **gifted**	No	I	E
11. A curriculum based on identified specialized interests should be provided for the **gifted**	No	I	E
12. Large blocks of independent time are more necessary with **gifted** than average children	No	I	E
13. Teachers of the **gifted** need more knowledge of behavior reinforcing techniques than teachers of average students	No	I	E
14. Instruction for the **gifted** should be ungraded	No	I	E
15. **Gifted** children need more individualized instruction than average children	No	I	E
16. Desired intellectual and social behavior should be systematically reinforced when teaching **gifted**	No	I	E
17. Standard school regulations should be strictly enforced by the teacher	No	I	E
18. **Gifted** children should play an increasing role in the determination and enforcement of classroom rules	No	I	E

CONCEPT	RATING Not True or Not Important	Fairly Important	Essential
19. Social interaction in the classroom should be encouraged as much as possible among **gifted** children	No	I	E
20. Emphasis should be placed on the personal adjustment of the **gifted** child	No	I	E

B. STAFF ORIENTATION AND SELECTION CRITERIA

1. Teachers of the **gifted** should have a sympathetic attitude toward differentiated education programs for the **gifted**	No	I	E
2. Teachers of the **gifted** should demonstrate a specialized knowledge of at least one subject area	No	I	E
3. All instructional and administrative staff at the school should have a basic understanding of the theory and operation of a differentiated program for the **gifted**	No	I	E
4. Teaching the **gifted** ideally requires at least a master's degree	No	I	E
5. Ability to teach the **gifted** should be considered more a function of experience than of special training	No	I	E
6. Ability to teach the **gifted** should be considered more a function of training than experience	No	I	E
7. Training and experience should be considered equally important factors in selecting teachers of the **gifted**	No	I	E
8. Teachers of the **gifted** should be able to perform as facilitators of learning rather than as disseminators of knowledge	No	I	E
9. Teachers of the **gifted** should receive continuous up-dated training to remain effective	No	I	E
10. Teachers of the **gifted** should be selected on the basis of rich academic background	No	I	E
11. Teaching **gifted** children should be rotated among all teaching staff members	No	I	E

CONCEPT	RATING: Not True or Not Important	Fairly Important	Essential
12. Prior performance with average children should be considered a good indication of a teacher's probable performance with **gifted** children	No	I	E
13. Experienced teachers tend to be more successful with the **gifted** than new teachers	No	I	E
14. Teachers of the **gifted** should be oriented towards close communications with other professionals dealing with the **gifted**	No	I	E
15. Teaching the **gifted** requires a different approach than teaching average children	No	I	E
16. Assignments for teaching the **gifted** should go to those with at least three years of teaching experience	No	I	E
17. Only the brightest teachers should work with **gifted** children	No	I	E
18. Teachers of the **gifted** need more self-confidence than teachers of average children	No	I	E
19. Laymen cannot teach **gifted** children effectively without special preparation	No	I	E
20. Teachers of the **gifted** should be required to meet specific certification requirements concerning this specialty	No	I	E

21. Please list by rank in two separate lists (if necessary), five criteria that you feel are most important for selecting teachers for the gifted and talented. Rank No. 1 for highest priority.

RANK	GIFTED	TALENTED
1:		
2:		
3:		
4:		
5:		

a. If you don't find it necessary to apply separate criteria, please check here ☐.

22. What can be done to encourage teachers to specialize in education for the **gifted** ?

_____

_____

_____

23. Using the scale provided (1-7), please indicate the minimum special training needed by a classroom teacher to work effectively with **gifted** children in each situation (a.-d.) described below.

1. None
2. A few "workshop" type classes
3. Several weeks "on-the-job training"
4. One semester of a formal course in teaching the gifted
5. Several courses in teaching the gifted
6. A teaching degree with an emphasis on education for the gifted
7. Other *(specify)* _____

(circle one number for each case)

a. Within a regular class, no specialized program 1 2 3 4 5 6 7
b. Within a regular class with specialized program for the gifted..... 1 2 3 4 5 6 7
c. In a separate class designed for gifted children 1 2 3 4 5 6 7
d. In a special school for the gifted 1 2 3 4 5 6 7

24 Check all boxes that describe a teacher who in your judgment could be identified as "a teacher of the gifted."

a. A teacher of gifted children in the regular classroom with no special provisions .....☐
b. A teacher who provides individualized instruction to the gifted within a regular class....☐
c. A teacher who teaches primarily gifted children in a special program of individualized instruction outside the regular classroom .....☐
d. A teacher of gifted children in an academic setting restricted to gifted children .....☐

25. What pupil personnel services are most needed by **gifted** children ?

_____

_____

_____

26. In your experience what is the general attitude of pupil personnel service workers toward the **gifted** ? *(check one for each)*

	Highly Positive	Slightly Positive	Neutral	Slightly Negative	Strongly Negative
a. School psychologist	☐	☐	☐	☐	☐
b. Guidance	☐	☐	☐	☐	☐
c. Social workers	☐	☐	☐	☐	☐
d. Tutorial staff	☐	☐	☐	☐	☐
e. Others *(specify)* _____	☐	☐	☐	☐	☐

Explain

_____

_____

27. In your judgment are most pupil personnel service workers adequately prepared to provide effective services for **gifted** children ? .....Yes ☐ .....No ☐

If no, what preparation is needed ?

_____

_____

_____

28. Does your state have any certification requirements for teaching the **gifted** ?

..... **Yes** ☐ ....**No**☐....**Don't know**☐

If yes, what are they ?

_____

_____

_____

_____

29. Is there an adequate supply of qualified personnel available to teach all the **gifted** children in your state ? .....**Yes** ☐ .....**No** ☐ .....**Don't know** ☐

30. Please assume inadequate supply of teachers of the gifted: what are the most useful methods of developing a sufficient number of teachers of the **gifted**? *(rank in order, 1 = highest)*

Rank

_____ **a. Special classes in teaching the gifted at the undergraduate level for future teachers**

_____ **b. A master's degree program in gifted education for teachers with previous teaching experience**

_____ **c. A master's degree program in gifted education for students with no prior teaching experience**

_____ **d. An in-service training program for teachers conducted in workshop sessions during the school year**

_____ **e. An intensive summer institute program for certified teachers with one or more years of experience**

f. Other *(specify)*

_____ _____

31. Assuming non-availability of local university resources for training teachers in **gifted** education (university more than 50 miles away), what is the most useful method of developing an adequate supply of teaching manpower ?

_____

_____

_____

_____

32. Is there a master's degree program specializing in teaching of the **gifted** at any institution of higher learning in your state ? .....**Yes**☐.....**No** ☐.....**Don't know**☐
(skip to Q. 33)

Is one needed ? ☐ **Yes** ☐ **No** ☐ **Explain**_____

33. Rate the usefulness of participating in such a master's program to each of the following:

	Not Needed	**Useful**	**Essential**
a. Administrators at the state level	☐	☐	☐
b. Administrators at the local level	☐	☐	☐
c. Teachers of the gifted	☐	☐	☐

34. Is there a specific useful role for paraprofessionals (teachers' aides) in education of **gifted** ?

.....Yes ☐.....No ☐ *(skip to section C)*

a. What role should paraprofessionals play in education of the gifted? *(specify tasks)*

_____

_____

b. Is there an adequate supply of paraprofessionals available to assist in the education of the gifted in your state ? .....Yes☐.....No ☐ .....Don't know☐

C. THE PROGRAM

Rate the following concepts according to their potential utility in a differentiated program for **gifted** children. Circle the value that most nearly fits the accompanying concept. *(as in Part A, above.)*

CONCEPT	RATING Not True or Not Important	Fairly Important	Essential
1. Not considering finances , differentiated programs for the **gifted** need greater resources than programs for average students	No	I	E
2. Some differentiated programs for the **gifted** should be carried out in the regular classroom by a teacher who is not a specialist in education for the **gifted**	No	I	E
3. When teachers must provide special programs for the **gifted**, they should be aided by a consultant	No	I	E
4. Instructional technology should be employed to individualize instruction of the **gifted**	No	I	E
5. Programs for the **gifted** must accommodate different learning types	No	I	E
6. Program objectives should stress:			
a. **Stimulation of individual interests**	No	I	E
b. **Extension of educational planning to the preschool level**	No	I	E
c. **Student initiative**	No	I	E
d. **Involvement of parents in their children's education**	No	I	E
e. **Involvement of community resource personnel in the program**	No	I	E
f. **Development of self-acceptance**	No	I	E
g. **Development of positive attitudes towards others**	No	I	E
h. **Recognition of early readiness to undertake complex learning tasks**	No	I	E
i. **Concept development**	No	I	E
j. **Creativity**	No	I	E

NOW, PLEASE GO BACK AND SELECT THE FIVE (5) LETTERED ITEMS (a–j) THAT YOU FEEL TO BE MOST IMPORTANT *(circle the letter in front of the concept)*

7. Who should be primarily responsible for making basic decisions affecting programs for the **gifted** at the school level ? *(check one)*

1. **School district administrators** .....☐
2. **Consultant or coordinator at state level** .....☐
3. **Consultant or coordinator at local level** .....☐
4. **Principal** .....☐
5. **Classroom teacher** .....☐
6. **Other** *(specify)*

_____ .....☐

These decisions should be made in consultation with: *(check all that apply)*

1. **School district administrators** .....☐
2. **Consultant or coordinator at state level** .....☐
3. **Consultant or coordinator at local level** .....☐
4. **Principal** .....☐
5. **Classroom teacher** .....☐
6. **Other** *(specify)*

_____ .....☐

8. Is there a need for a full-time coordinator (or consultant) for **gifted** programs at the local level ? .....**Yes** ☐ .....**No** ☐

If yes, what minimum qualifications should he have ?

_____

_____

_____

9. In a district that provides differentiated programs for the **gifted**, what is the extent of need for in-service training of school administrators ? **No Need** ☐ **Important** ☐ **Essential** ☐

10. What are the most effective methods of stimulating positive interest in programs for the **gifted** ?

_____

_____

_____

_____

_____

_____

11. To what extent should parents and students be involved in decisions affecting development and improvement of programs for the **gifted** ?

_____

_____

_____

_____

_____

12. Is there a need for public relations work concerning programs for the **gifted**?

.....**Yes** ☐ .....**No** ☐

If yes, what is the best way to communicate with the community at large ?

_____

_____

_____

_____

_____

13. Is it necessary to provide a continuous program or series of programs for the **gifted** child throughout the school experience ? .....**Yes** ☐ .....**No** ☐

14. If resources are limited, what is the order of priority (by level) in which differentiated programs for the **gifted** should be funded ? *(please rank order* **Number 1 = highest priority***)*

Rank

a. **Prekindergarten** .....____

b. **Primary** *(Grades K-3)* .....____

c. **Elementary** *(Grades 4-6)* .....____

d. **Jr. high school** *(Grades 7-9)* .....____

e. **Sr. high school** *(Grades 10-12)* .....____

f. **Post high school**.....____

g. **Other** *(specify)*

_____.....____

15. Is education for the **gifted** a continuing priority at the local level in your community ?

.....**Yes** ☐ .....**No** ☐

If no, what can be done to make it one if you believe there is a need to do so ?

_____

_____

_____

16. How would you assess the present attitude of each group below toward the investment of public funds in differentiated programs for the **gifted** ?

	Highly Unfavorable	**Unfavorable**	**Neutral**	**Favorable**	**Highly Favorable**
a. **Parents of gifted**	☐	☐	☐	☐	☐
b. **Teachers of gifted**	☐	☐	☐	☐	☐
c. **Teachers of heterogeneous classes**	☐	☐	☐	☐	☐
d. **Administrators:**					
1. **Local**	☐	☐	☐	☐	☐
2. **State**	☐	☐	☐	☐	☐
e. **Legislators:**					
1. **State**	☐	☐	☐	☐	☐
2. **Federal**	☐	☐	☐	☐	☐
f. **Gifted children**	☐	☐	☐	☐	☐
g. **Lay public**	☐	☐	☐	☐	☐

17. What can be done to change unfavorable attitudes if you believe there is a need to do so ?

_____

_____

_____

_____

_____

18. In school districts where financial constraints or lack of a sufficient number of **gifted** pupils prevent establishment of a complete educational program for the **gifted,** what are alternative ways to meet needs of the **gifted** ?

_____

_____

_____

_____

19. Should there be a person at the state level who is delegated the responsibility for education of **gifted** children throughout the state ? .....**Yes** ☐.....**No** ☐

If yes, what should his function be ? *(circle the number beside all that apply)*

1. **Develop awareness of need for differentiated programs for the gifted**
2. **Develop programs for identification of the gifted**
3. **Develop certification standards for teachers of the gifted**
4. **Develop differentiated curricula for the gifted**
5. **Explain and coordinate statewide educational programs for the gifted**
6. **Develop and coordinate training activities for teachers and administrators**
7. **Evaluate instructional materials and programs for the gifted**
8. **Administer state funding for programs for the gifted**
9. **Coordinate materials centers and demonstration projects**
10. **Administer or coordinate Federal funding for the gifted**
11. **Other** *(specify)*

_____

20. What factors should be considered (in order of importance) when grouping **gifted** children ?

a. _____

_____

b. _____

_____

c. _____

_____

21. In your own terms, please define homogeneous grouping as it applies to **gifted** children.

_____

_____

_____

_____

_____

22. Do you think that homogeneous grouping is more important for **gifted** children than average children ? .....**Yes** ☐ .....**No** ☐

Explain:

_____

_____

_____

_____

_____

23. What conditions must exist to make summer programs valuable for the **gifted** ?

_____

_____

_____

_____

24. Are part-time programs useful ? *(Do not consider after-school programs as "part-time")*

.....**Yes** ☐ .....**No** ☐

If yes, what is the minimum percentage of a **gifted** student's time that must be spent during the regular school day in differentiated programs in order for them to be effective ?

_____ %

25. Do you feel that "after-school" programs for the **gifted** are useful ?

.....**Yes** ☐ .....**No** ☐

Explain:

_____

_____

_____

_____

26. Do you feel that **gifted** students can make better use of the community as a learning resource than average students?.....**Yes**☐.....**No**☐

Explain

_____

_____

_____

_____

27. Please indicate present availability of programs for the **gifted** in your state by checking the appropriate phrase under each level listed below. Next give your opinion as to the optimum condition by checking one item in the optimum column. If none of the options agree with the situation in your state, give a brief description under "other." Make every attempt to avoid using the "other" category. Consider the services in your state as a whole for **gifted** children.

a. Availability of programs for **gifted** children at the primary *(Grades K-3)* level may be best summarized as:

	Present *(check one)*	**Optimum** *(check one)*
1. None at all	☐	☐
2. Only rare, isolated cases	☐	☐
3. A few communities have adequate programs available	☐	☐
4. A few demonstration facilities exist	☐	☐
5. Most communities have adequate programs available	☐	☐
6. Complete programs are available throughout the state	☐	☐
7. Don't know	☐	☐
8. Other *(specify)* _____	☐	
9. Other *(specify)* _____		☐

b. Availability of programs for **gifted** children at the elementary *(Grades 4-6)* level may be best summarized as:

	Present *(check one)*	**Optimum** *(check one)*
1. None at all	☐	☐
2. Only rare, isolated cases	☐	☐
3. A few communities have adequate programs available	☐	☐
4. A few demonstration facilities exist	☐	☐
5. Most communities have adequate programs available	☐	☐
6. Complete programs are available throughout the state	☐	☐
7. Don't know	☐	☐
8. Other *(specify)* _____	☐	
9. Other *(specify)* _____		☐

c. Availability of programs for **gifted** children at the jr. high school *(Grades 7-9)* level may be best summarized as:

	Present *(check one)*	Optimum *(check one)*
1. None at all	☐	☐
2. Only rare, isolated cases	☐	☐
3. A few communities have adequate programs available	☐	☐
4. A few demonstration facilities exist	☐	☐
5. Most communities have adequate programs available	☐	☐
6. Complete programs are available throughout the state	☐	☐
7. Don't know	☐	☐
8. Other *(specify)* _____	☐	
9. Other *(specify)* _____		☐

d. Availability of programs for **gifted** children at the sr. high school *(Grades 10-12)* level may be best summarized as:

	Present *(check one)*	Optimum *(check one)*
1. None at all	☐	☐
2. Only rare, isolated cases	☐	☐
3. A few communities have adequate programs available	☐	☐
4. A few demonstration facilities exist	☐	☐
5. Most communities have adequate programs available	☐	☐
6. Complete programs are available throughout the state	☐	☐
7. Don't know	☐	☐
8. Other *(specify)* _____	☐	
9. Other *(specify)* _____		☐

28. Services for the **gifted** in my state are concentrated in the following areas: *(check all that apply)*

- a. Large cities ☐
- b. Suburbs of large cities ☐
- c. Small cities ☐
- d. Rural areas ☐
- e. There are no services in my state ☐
- f. Other *(specify)* _____ ☐

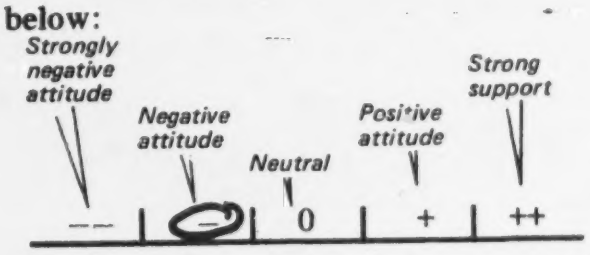
29. Please assess the overall attitude toward education programs for the **gifted** of:

a. Federal, state and local education agencies

b. Voters in your state and locality

Use the ATTITUDE SCALE explained below:

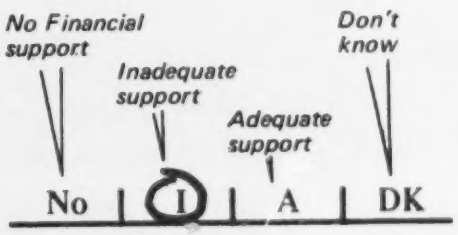
ATTITUDE SCALE



Then estimate the amount of financial support that has been given or would be given to these programs by each group.

Use the FINANCIAL SUPPORT SCALE explained below:

FINANCIAL SUPPORT SCALE



Circle one entry on each scale for each item under a. and b.

	ATTITUDE					FINANCIAL SUPPORT			
a. Education Agencies									
1. Local	– –	–	0	+	++	No	I	A	DK
2. State	– –	–	0	+	++	No	I	A	DK
3. Federal	– –	–	0	+	++	No	I	A	DK
b. Voters									
1. Local level	– –	–	0	+	++	No	I	A	DK
2. State level	– –	–	0	+	++	No	I	A	DK

30. What in your opinion are the main sources of opposition to special education for the **gifted** in your state ? *(please be as brief as possible)*

_____

_____

_____

_____

31. How much effort do you believe is being put forth by the various agencies responsible for instituting and maintaining programs for the **gifted** ? *(check one for each)*

	Little or no effort	Some disorganized effort	Much effort but poorly organized	Fairly well-organized effort	Very well-organized effort
Local agencies:					
a. Urban	☐	☐	☐	☐	☐
b. Suburban	☐	☐	☐	☐	☐
c. Rural	☐	☐	☐	☐	☐
State agencies	☐	☐	☐	☐	☐
Federal agencies	☐	☐	☐	☐	☐

D. FINANCES

The following pages contain a list of possible ways to use financial aid for the education of **gifted** children. Beside each is a 4-point scale on which you are asked to indicate the usefulness of the aid described in the statement. *(circle all that apply)*

	No NOT NEEDED	S Necessary to START programs	C Necessary to CONTINUE programs	I Necessary to IMPROVE programs
1. Preservice (undergraduate) financial aid for teachers of the **gifted**	No	S	C	I
2. Graduate level financial aid for teachers of the **gifted**	No	S	C	I
3. Graduate level financial aid for pupil personnel specialists	No	S	C	I
4. Graduate level financial aid for consultant personnel	No	S	C	I
5. Financial aid for in-service training of teachers and other qualified resource personnel	No	S	C	I
6. Support for research	No	S	C	I
7. Grants for the development of curricula for the **gifted**	No	S	C	I
8. A national instructional materials center for the development and dissemination of curricular materials	No	S	C	I

	No **NOT NEEDED**	S Necessary to **START** programs	C Necessary to **CONTINUE** programs	I Necessary to **IMPROVE** programs
9. Grants to state education agencies to provide services for the **gifted** offered by state departments of education	No	S	C	I
10. Direct financial aid to school districts to assist in developing and sustaining programs for the **gifted**	No	S	C	I
11. Federally funded regional demonstration centers	No	S	C	I
12. Materials and equipment grants to local education agencies	No	S	C	I
13. Grants to local education agencies for pilot and experimental projects for the **gifted**	No	S	C	I
14. Financial support for the development of models to evaluate programs	No	S	C	I
15. Grants to support state agency staff	No	S	C	I
16. Other *(specify)*				
_____	No	S	C	I
_____				
_____	No	S	C	I

NOW, PLEASE GO BACK AND SELECT THE FIVE (5) NUMBERED ITEMS (1–15) THAT YOU FEEL TO BE OF HIGHEST PRIORITY *(circle the number in front of the aid program)*

Below is the same list of financial aid programs (both actual and hypothetical) found in the previous section. After each item is a scale on which you are asked to indicate the current availability of funds for the program and the primary source of these funds, based on your personal knowledge. If you know of no funds available for the item, skip the primary source question for that item.

	AVAILABILITY *(circle one)*				PRIMARY SOURCE *(circle one, if applicable)*			
	No **NO** Funds Available	L Very **LIMITED** Funds Available	I Slightly **INADEQUATE** Funds Available	A **ADEQUATE** Funds Available	L **LOCAL** Level	S **STATE** Level	F **FEDERAL** Level	DK **DON'T KNOW**
17. Preservice (undergraduate) financial aid for teachers	No	L	I	A	L	S	F	DK

	AVAILABILITY *(circle one)*				PRIMARY SOURCE *(circle one, if applicable)*			
	No	L	I	A	L	S	F	DK
	NO Funds Available	Very LIMITED Funds Available	Slightly INADEQUATE Funds Available	ADEQUATE Funds Available	LOCAL Level	STATE Level	FEDERAL Level	DON'T KNOW
18. Graduate level financial aid for teachers	No	L	I	A	L	S	F	DK
19. Graduate level financial aid for pupil personnel specialists	No	L	I	A	L	S	F	DK
20. Graduate level financial aid for consultant personnel	No	L	I	A	L	S	F	DK
21. Financial aid for in-service training of teachers and other qualified resource personnel	No	L	I	A	L	S	F	DK
22. Support for research	No	L	I	A	L	S	F	DK
23. Grants for the development of curriculum for the gifted	No	L	I	A	L	S	F	DK
24. A national instructional materials center for the development and dissemination of curricular materials	No	L	I	A	L	S	F	DK
25. Grants to state educational agencies to improve services offered by state departments of education	No	L	I	A	L	S	F	DK
26. Direct financial aid to school districts to assist in developing and sustaining programs	No	L	I	A	L	S	F	DK

	AVAILABILITY *(circle one)*				PRIMARY SOURCE *(circle one, if applicable)*			
	No	L	I	A	L	S	F	DK
	NO Funds Available	Very LIMITED Funds Available	Slightly INADEQUATE Funds Available	ADEQUATE Funds Available	LOCAL Level	STATE Level	FEDERAL Level	DON'T KNOW
27. Federally funded regional demonstration centers	No	L	I	A	L	S	F	DK
28. Materials and equipment grants to local education agencies	No	L	I	A	L	S	F	DK
29. Grants to local education agencies for pilot and experimental projects for the **gifted**	No	L	I	A	L	S	F	DK
30. Financial support for the development of models to evaluate programs for the **gifted**	No	L	I	A	L	S	F	DK
31. Grants to support state agency staff	No	L	I	A	L	S	F	DK
32. Other *(specify)* _____	No	L	I	A	L	S	F	DK

33. To which of the following uses of financial aid should administrators give priority ? *(Rank in order, using Number 1 as the highest priority, then rate the importance of each type of funding)*

RANK		RATING		
		Not Important	Important	Essential
_____	Personnel	No	I	E
_____	Supplies and equipment	No	I	E
_____	Library resources	No	I	E
_____	Funds for study trips	No	I	E
_____	In-service teacher training	No	I	E
_____	Specialized lay consultants	No	I	E
_____	Salaries for program coordinators	No	I	E
_____	Program initiation funds	No	I	E
_____	Program improvement funds	No	I	E
_____	Other *(specify)* _____	No	I	E

34. What is a reasonable estimate of the cost of in-service preparation of one teacher of the **gifted** over a one-year period ? Base your estimate on any items you feel to be relevant. Consider the following, if applicable:

Travel
Course tuition
Workshop costs
Substitute teachers
Experts as teachers training resources
Room and board

$_____ per teacher, per year

35. What do you feel would be a minimum average cost per year for a five-year, state-wide program to identify the **gifted** ?

$_____ per year

36. What do you feel would be a minimum average cost per year for a five-year, state-wide program to provide differentiated education for those identified as **gifted** ?

$_____ per year

37. Are you presently serving as coordinator or consultant to any educational agency ?

..... Yes ☐ ..... No ☐

If yes, please identify the agency (or agencies) and your title(s) or position(s).

_____

_____

38. If Federal funds were made available to initiate a nationwide program for differentiated education for the gifted, what would be the chronological order in which this money should be spent to insure maximum long range efficiency?

(Rank the first step as 1, the second as 2, and the third as 3.)

Rank only the first three steps.

Rank Grants should be made:

_____ **a. To states to establish or strengthen an office at the state level to plan and coordinate an overall state-wide program for the gifted**

_____ **b. To states to identify gifted**

_____ **c. To states to distribute directly to local education agencies**

_____ **d. To states to establish state-wide inservice training programs for teachers and/or administrators from local school districts**

_____ **e. To states to train officials to prepare them to begin planning of programs**

_____ **f. To universities to develop training programs for teachers of gifted**

_____ **g. To universities to develop curricula for gifted**

_____ **h. To universities to perform basic research on gifted**

_____ **i. Other** *(specify)* _____

As a final note please identify the three most important outcomes desired from differentiated programs for gifted and talented.

If you feel that any urgent priorities concerning education for the gifted and talented have not been adequately covered in this questionnaire, please describe them below.

APPENDIX C[1/]

SCHOOL STAFFING SURVEY

SAMPLE DESIGN

C.1 The Office of Education maintains on computer tape a master file of schools entitled "Universe of Public and Non-public Elementary and Secondary Day Schools." The most recent "Universe" tape, from the 1968-69 school year, was made available for the purpose of selecting the sample of schools for the School Staffing Survey.

C.2 The list of schools from which the main sample was selected was obtained from the "Universe" tape of 116,181 by deleting the following categories of schools:

- Schools in geographical locations outside the 50 United States and the District of Columbia
- Schools operated by nonpublic agencies
- Schools operated by public agencies other than local education agencies (LEAs)
- Schools in LEAs with total enrollment less than 300
- Schools with zero enrollments or incomplete records (a separate sample was drawn from this category, as indicated below).

1/ Methodological Description of Phase II, School Staffing Survey, Westat Research, Inc., 1971.

The remaining 82,751 schools were then used as the sampling list or frame for the Survey.

C.3 Schools mentioned in the last item above are mainly those which appeared on the previous "Universe" tape but did not submit data for inclusion in the current "Universe" tape. Most of these schools are still pertinent to the Survey and therefore were sampled independently of the main sample. Of these 1,488 schools, 99 were randomly selected and questionnaires sent.

C.4 The main sample frame or the list of schools from which the primary sample was selected contained 82,751 school records. A sample of approximately 4,400 schools was desired from this list. Preparatory to sample selection, the schools were categorized into 30 strata according to size, location, and type of school. The various strata and the number of listed schools in each are given in Table C.1. Information needed to stratify by enrollment size and type of school was taken directly from the school record on the tape. Type of school was taken as coded, without reference to the indicated grade span.

C.5 Classification into the three areas was based on data furnished by the Office of Education. The intention here was to classify schools in cities with populations exceeding 100,000 in the 1960 census as central city schools. Schools in the remainder of the standard metropolitan statistical areas that contained these cities were classified as suburban schools. All remaining schools were classified as other schools.

SAMPLE SIZE

C.6 The total of 82,751 schools includes approximately 2,000 duplicate school records, since schools with a grade span covering both elementary and secondary grades are split into two segments and recorded on the "Universe" tape as both an elementary school and a secondary school. These schools cannot be identified on the list. However, those included in the sample were identified by their response to the grade span question and the appropriate adjustments to the probability of selection were applied.

C.7 It is estimated further that between 1% and 3% of the actual universe of schools is missing from the total sample list. No attempt was made to locate and sample these schools.

C.8 Three different questionnaire forms (X, Y, and Z) were devised for the Survey. The size and allocation of the sample desired for each form type and for each area-type of school combination was designated by the Office of Education. For purposes of this study, only Form "Y" was used. See Table C.2 for a breakdown of the sample size.

C.9 Designations of sample size in Table C.2 are given only by type of school and by location for Form Y. The allocation of schools into five categories by size of enrollment was the final item preparatory to sample selection.

TABLE C.1

SCHOOLS IN FRAME FOR MAIN SAMPLE,
BY ENROLLMENT, LOCATION, AND TYPE

Type of School (Area)	Enrollment					
	2,000 and over	1,000-1,999	500-999	250-499	Under 250	Total
Elementary						
Central city	28	1,256	4,230	2,436	906	8,856
Suburban	4	493	7,007	5,540	2,710	15,764
Other	11	446	7,810	12,995	13,578	34,840
Total	43	2,195	19,047	20,971	17,194	59,450
Secondary						
Central city	546	1,277	626	147	215	2,811
Suburban	365	1,807	2,010	764	508	5,454
Other	216	1,757	4,335	4,313	4,415	15,036
Total	1,127	4,841	6,971	5,224	5,138	23,301

TABLE C.2

APPROXIMATE SIZE OF SAMPLE DESIRED, FOR FORM Y
BY TYPE OF SCHOOL AND LOCATION

Type of School (Area)	Questionnaire Form Y
Elementary	
Central city	800
Suburban	200
Other	200
Total	1,200
Secondary	
Central city	400
Suburban	200
Other	200
Total	800
Grand total	2,000

C.10 Table C.3 presents the total number of schools selected for the main sample (Forms X, Y, and Z). Included with this is the breakdown according to the three types of forms used in the Survey. The total counts by form type are presented in Table C.4.

C.11 The selection of the schools for the sample was accomplished systematically within each cell or stratum given in Table C.1. For each stratum, the numbers presented in Table C.2 were allocated over the five enrollment size categories. These values were then used to determine sampling fractions for each stratum. Random starting counts as well as random form-type sequences were selected for each stratum independently. The results of the systematic selection within each cell are given in Table C.3.

TABLE C.3

DISTRIBUTION OF SAMPLE BY ENROLLMENT, LOCATION, AND TYPE

Type of School (Area)	Enrollment					
	2,000 and over	1,000-1,999	500-999	250-499	Under 250	Total
Elementary						
Central city	13	403	708	398	81	1,603
Suburban	4	28	199	120	48	399
Other	4	16	131	148	100	399
Total	21	447	1,038	666	229	2,401
Secondary						
Central city	345	505	253	53	50	1,206
Suburban	68	172	100	40	20	400
Other	32	92	123	84	64	397
Total	445	771	476	177	134	2,003
Grand total	466	1,218	1,514	843	363	4,404

TABLE C.4

DISTRIBUTION OF SAMPLE BY QUESTIONNAIRE FORM

Form Type	Number in Sample
Y	1,996
X+Z	2,408
Total	4,404

APPENDIX D

PUPIL CENTERED INSTRUMENT (PCI)

D.1 Analysis of selected data derived from the 1970 Elementary School Survey (Pupil Centered Instrument—PCI) was to have been conducted as part of this report. Unfortunately, however, delays in processing and tabulating PCI information necessitated its exclusion.

D.2 The survey consisted of four questionnaires, one for the school district administrator, one for the principal, and two for teachers in grades 2, 4, and 6. Each teacher answered one questionnaire for himself and the other questionnaire for a sample of randomly selected pupils in his class. The total sample of pupils was 5% of the U.S. elementary school population. Information from these questionnaires was to have been used in the "Analytical Studies of Selected Educational Data" to examine the geographical distribution of the need for, and availability of, programs for the education of the gifted and talented throughout the country.

D.3 Prior to the elimination of the PCI component from the present study, a preliminary plan for analyzing the anticipated data was devised. Table D.1 contains the survey questions that were to have been used in the analysis and the information to have been derived from each. This tabulation is included to show what kind of analysis was to have been performed and to indicate the planning effort made. The questionnaires are identified in Table D.1 as follows:

SDA - School District Administrator

T - Teacher

P - Pupil (completed by the teacher)

(No questions addressed to the principals were included.)

TABLE D.1

QUESTIONS REGARDING GIFTED AND TALENTED CHILD EVALUATION THAT WERE TO HAVE BEEN EXPLORED WITH THE BELMONT PCI DATA

Questionnaire and Number	Question
SDA 7c	What percentage of all school districts have programs for the gifted which are Federally funded?
SDA 7c	To what extent do these Federally funded programs and/or projects meet the needs of the gifted children in the District?
SDA 7c	What percentage of school districts report that they have programs for the gifted, but do not receive Federal funds?
SDA 7c	What percentage of school districts report no programs and no need for such programs?
SDA 7c	What percentage of school districts recognize a need for programs for the gifted, but have none available?
T 16	How much in-service training specifically related to the gifted, has the average teacher received for the 1969-70 school year?
T 21	What kind of teacher aid (professional or paraprofessional) is available to the average teacher?
P 12c, SDA district code	What is the geographic percent distribution of gifted children?
P 29	What percentage of students classified as academically gifted participate in any Federally funded project or program?
P 30	What percentage of the above participants are enrolled in each type of ESEA and VEA program?
P 31	What is the distribution of methods used to place pupils in any of the above Federal programs?
P 35	What percent of gifted pupils participate in summer programs?
P 12, 35	How many average hours of summer instruction does the gifted pupil receive as compared to other students?
P 36	What is the distribution of participation by gifted pupils in various special programs?
P 37	What is the distribution of total number of hours spent by gifted pupils in special programs for the 1969-70 year?

TABLE D.1 (Cont)

Questionnaire and Number	Question
P 11	What is the distribution of persistent school problems common to gifted children?
P 11	What percentage of gifted students have more than one persistent problem? More than two?
P 5	What is the distribution of days absent for gifted pupils?
P 10	How often does the teacher predict a college education for a gifted child at the elementary school level?
P 41	What behavioral and academic improvement and setbacks have in general been noticed by teachers of the gifted?
P 42	How well do gifted children stick to difficult educational tasks?
P 46	What kinds of achievement tests scores are available for gifted children?

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